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United States
Department of
Agriculture



Humboldt National Forest Land and Resource Management Plan

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PREFACE

This Land and Resource Management Plan has been developed for the Humboldt National Forest. For information pertaining to the development of this plan, details can be provided by:

Forest Supervisor
Humboldt National Forest
976 Mountain City Highway
Elko, NV 89801

A. Applicable Laws and Regulations

The principal acts providing direction for developing this Land and Resource Management Plan are:

1. Multiple Use and Sustained Yield Act of 1960
2. National Environmental Policy Act (NEPA) of 1969
3. Forest Rangeland Resources Planning Act (RPA) of 1974
4. National Forest Management Act (NFMA) of 1976

RPA requires the Forest Service to conduct an assessment or inventory of the Nation's renewable resources and develop a program for use of the resources. The assessment includes the determination of the capability of all National Forest lands to provide various goods and services. It also includes an estimation of future demands for those goods and services.

B. Public Review and Appeal

If any particular provision of this proposed action, or the application thereof to any person or circumstances, is held invalid, the remainder of the proposed action and the application of such provision to other persons or circumstances shall not be affected thereby.

The right to request an administrative appeal of the Regional Forester's decision to approve a Forest Plan is contained in 36 CFR 211.18 (d), which describes the appeal process. Intermediate decisions made during the planning process prior to the approval or disapproval decisions are not reviewable.

THIS DOCUMENT PRESENTS A MANAGEMENT STRATEGY
FOR THE NEXT 10 TO 15 YEARS



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* A revised Forest Plan Map is included in this packet.



I.



Forest Plan Introduction



CHAPTER I

FOREST PLAN INTRODUCTION

A. Purpose of the Forest Plan

The Forest Plan guides all natural resource management activities and establishes management standards and guidelines for the Humboldt National Forest. It describes resource management practices, levels of resource production and management, and the availability and suitability of lands for resource management.

The Forest Plan embodies the provisions of the NFMA, the regulations, and other guiding documents. The prescriptions and standards and guidelines are a statement of the Plan's management direction; however, the project outputs, services, and rates of implementation are dependent on the annual budgeting process.

B. Relationship of the Forest Plan to Other Documents

Development of the Forest Plan takes place within the framework of Forest Service Regional and National planning. The relationship among different planning levels is shown as follows:

Congressional Acts

National level

Forest Service planning through the
Regional Guide for the Intermountain Region through
Renewable Resource Assessment and Program (RPA)

Regional planning level through the
Regional Guide for the Intermountain Region

Forest level planning through the
Humboldt National Forest
Land & Resources Management Plan

The RPA Program sets the National direction and output levels for the National Forest system lands. It is based on suitability and compatibility information from each Forest Service Region.

Each Forest Service Region distributes its share of national production targets to each of its Forests. The share each National Forest receives is based on detailed information gathered at the Forest level.

The Land and Resource Management Plan validates or provides a basis for changing production levels assigned by the Region. Activities and projects are planned and implemented by the Forest to carry out the direction developed in the Forest Plan. Information from all the National Forests in the Region was used in developing the Intermountain Regional Guide.

CHAPTER I

Roadless areas have been reevaluated in this planning process. A recommendation for future management of the areas has been made. Congressional legislation will be needed to designate recommended areas as wilderness. Details concerning the roadless area analysis are in Appendix C of the Appendix document.

The Forest Plan is the selected alternative of the FEIS and is based on the various considerations which have been addressed in the FEIS. The planning process and the analysis procedure which were used in developing this Plan, as well as the other alternatives that were considered, are described or referenced in the FEIS. Activities and projects will be tied to the accompanying FEIS as provided for in 40 CFR 1502.20. The local project environmental analysis will use the data and evaluations in the Plan and FEIS as its basis.

C. Plan Structure

This plan provides the long term direction for managing the Humboldt National Forest. It contains the overall directions and activities which will be required to achieve the desired state of the Forest. Management area maps indicate where the activities will occur.

The Forest Plan contains management direction for the Humboldt National Forest. The FEIS described the alternatives considered in arriving at that direction and assessed the environmental effects of implementing the Plan and other alternatives.

The Forest Plan is organized into five chapters:

- | | |
|--------------|---|
| Chapter I. | Forest Plan Introduction |
| Chapter II. | Analysis of the Management Situation |
| Chapter III. | Plan Responses to Issues, Concerns, and Opportunities |
| Chapter IV. | Forest Management Direction |
| Chapter V. | Implementation of the Forest Plan |

Details concerning the various subsections and pages are found in the Table of Contents.

The chapter titled "Forest Management Direction" deals with the multiple use goals and objectives. It also lists the management practices and standards and guidelines, Forest-wide and for management of specific areas. The "Implementation of the Forest Plan" chapter deals with the means to implement the plan and evaluate and monitor the effects of management practices. All glossary and Appendix references can be found in the separate Appendix document.

Maps displaying various resources and associated management activities were included in a map packet enclosed with the draft Plan. A new Plan map reflecting changes made in the Preferred Alternative is enclosed. By studying the map concurrently with the Forest Plan, the reader can better understand the proposed action.

D. Forest Description

The Humboldt National Forest is located in Nevada. The gross area administered by the Forest is 2,680,440 acres. The net National Forest acres within the Administrative Unit are 2,527,929. The Forest makes up 3.6 percent of the State of Nevada. The National Forest lands are located in five counties:

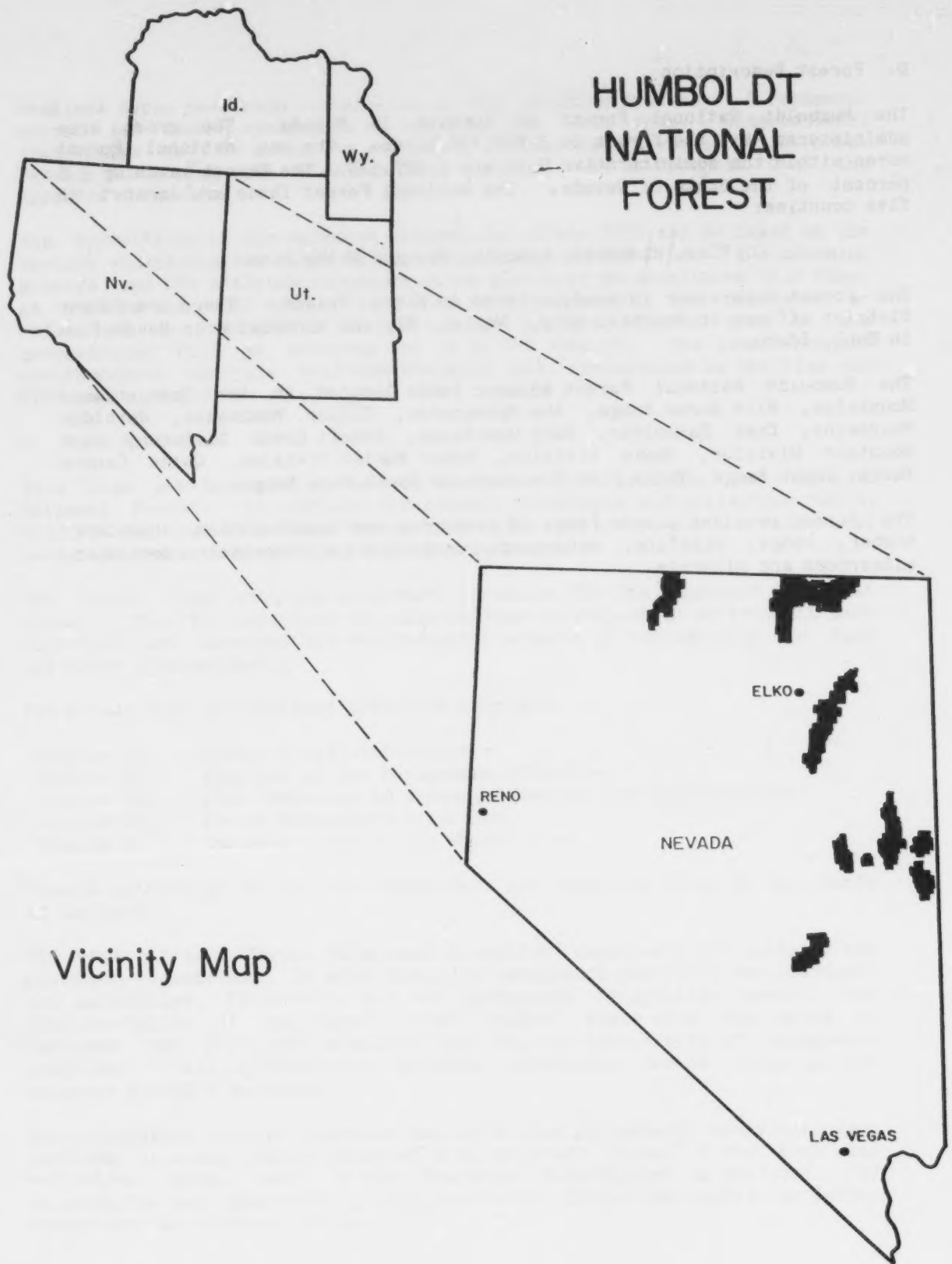
Elko, Humboldt, Lincoln, Nye and White Pine

The Forest Supervisor is headquartered in Elko, Nevada. There are Ranger District offices in Mountain City, Wells, Ely and Winnemucca in Nevada and in Buhl, Idaho.

The Humboldt National Forest manages lands located in the Independence Mountains, Wild Horse Range, the Mahoganies, Copper Mountains, Jarbidge Mountains, East Humboldts, Ruby Mountains, Schell Creek Division, Ward Mountain Division, Snake Division, Mount Moriah Division, Quinn Canyon Range, Grant Range, White Pine Division and Santa Rosa Range.

The Forest provides a wide range of resources and opportunities including: timber, range, wildlife, watershed, developed and dispersed recreation, wilderness and minerals.

HUMBOLDT NATIONAL FOREST



Vicinity Map

11.

Analysis of the
Management
Situation
Summary





CHAPTER II

ANALYSIS OF THE MANAGEMENT SITUATION SUMMARY

A. INTRODUCTION

This chapter describes the present condition of each Forest resource and the environment affected by implementing any of the alternatives. Future demand for Forest resources, the Forest's ability to supply that demand, and the expected future condition of the resources are summarized. Information in this chapter was drawn primarily from the "Analysis of the Management Situation" (AMS), approved in June 1984. 1/

B. PHYSICAL AND BIOLOGICAL SETTING

The Humboldt National Forest manages mountain lands located in northern and eastern Nevada. National Forest administered lands are located in two major geographic areas:

- The northern portions of the Mountain City and Jarbidge Ranger Districts are located within the Snake River Plains.
- The southern portions of the Mountain City and Jarbidge Ranger Districts, and the Ruby Mountains, Ely, and the Santa Rosa Ranger Districts are located within the Great Basin.

The Forest boundary encompasses 2,680,440 acres of which 2,527,929 are National Forest administered land. The remaining 152,511 acres are owned by State and local governments or private concerns.

The Forest is divided into five Ranger Districts:

- Mountain City District: Headquartered in Mountain City, Nevada. Administers the Independence, Bull Run and Copper Mountains in Elko County.
- Ruby Mountains District: Headquartered in Wells, Nevada. Administers the East Humboldt and Ruby Mountain Ranges in Elko and northern White Pine Counties.
- Jarbidge District: Headquartered in Buhl, Idaho. Administers the Jarbidge Mountains of Elko County.
- Ely District: Headquartered in Ely, Nevada. Administers the Schell Creek, Snake, Ward, and northern portions of the White Pine Ranges in White Pine County. The Grant Range, southern portion of the White Pine Range, and northern portion of the Quinn Canyon Range are in Nye County. The southern most extremity of the Quinn Canyon Range is located in Lincoln County.
- Santa Rosa District: Headquartered in Winnemucca, Nevada. Administers the Santa Rosa Range in Humboldt County.

1/ The AMS is available for review at the Forest Supervisor's Office.

C. ECONOMIC AND SOCIAL SETTING

ZONE OF INFLUENCE

The Humboldt National Forest primary zone of influence is the communities and counties in northern and eastern Nevada within and adjacent to the Forest that are directly influenced by Forest policies and decisions. It includes five counties in Nevada: Elko, Humboldt, Lincoln, Nye and White Pine.

Although most of Nevada's population resides in urban areas (85% in 1980), the population in the primary zone of influence remains predominantly rural with only 37 percent living in urban areas. The counties are large and sparsely populated. As of 1980, 47,650 people lived within the primary zone of influence which covers 64,500 square miles of land. Population is expected to increase by 2 percent per year from 1980 to 2000. Personal income is projected to increase by 4.6 percent per year between 1979 and 2000; a significantly higher increase than projected for the nation as a whole.

The major source of the zone's economy is services (including gambling and tourism), government, and trade. Mining and agriculture, although secondary, continue to contribute significantly to local and state economies. In 1978 the zone produced 41 percent of the State's total agricultural market value; 64 percent of this value was livestock production. Projections indicate that the structure of the local economies will remain stable over the period 1980 to 2000.

TABLE II-1--Economic Indicators, Past Trends, and Baseline Projections
for Primary Zone of Influence (1978 dollars)

	Past Trends				Baseline		
	1967	1970	1977	1979	1985	1990	1995
Population (M Persons)3/	37.6	38.4	40.2	43.5	52.7	58.4	64.1
Income (MM\$)1/	201.7	237.4	278.8	33.0	470.8	598.8	730.3
Employment (M Persons)1/	22.2	21.9	22.7	24.6	28.0	30.2	31.0
Payments under 25% (Fund in lieu of taxes) (M\$)2/	NA	NA	NA	87.8	85.7	100.0	120.0

1/ Source: Bureau of Economic Analysis, Regional Economic Information System.

2/ Source: Department of Interior (Figures are calculated from all Federal land in the counties.)

3/ Source: Fiscal and Accounting Management, Intermountain Region, Forest Service.

The secondary zone of influence is that area which is indirectly impacted by Forest policy and decisions. This area includes counties in southern Idaho and western Utah which are affected by the Forest's decisions on livestock grazing. The zone also includes a larger area of Nevada, difficult to define, because of the many recreational opportunities which attract visitors from all over Nevada.

D. RESOURCE ELEMENTS

1. RECREATION

In 1983, the Forest recorded 579,000 recreation visitor days, despite being a considerable distance from any major population center. Reno to the west, Las Vegas, to the south, and Salt Lake City, to the east all have major recreation destination areas closer than the Humboldt National Forest. The recreational opportunity spectrum (ROS) is highly diversified and includes camping, picnicking, driving for pleasure, helicopter skiing, cross-country skiing, snowmobiling, hiking, hunting and fishing.

a. Developed Recreation - Public

Presently, there are 26 developed camping and picnic sites on the Forest. Distribution of the developed recreation facilities by Ranger District is shown in Table II-2.

TABLE II-2: Developed Recreational Facilities

Ranger District	Campground	Picnic	Scenic/Interpretive
Mountain City	2	0	0
Ruby Mountains	3	2	1
Jarbridge	4	0	0
Ely	8	5	4
Santa Rosa	<u>1</u>	<u>1</u>	<u>0</u>
TOTAL	18	8	5

Most of the use of developed facilities occurs during the summer months and fall hunting season. Total recreation capacity on these developed sites is 3,075 persons-at-one-time (PAOTs). Presently 16 of the 26 sites are designated as fee areas. In 1981, returns to the Treasury from these sites was \$18,416.

Interest in recreational activities grew after the World War II population boom and the proliferation of the automobile and improved highways. Most of the Forest's campgrounds were rehabilitated and expanded during the 1960's

as a result of this increased use. In the twenty years since then, many sites have deteriorated substantially. Deterioration includes loss of vegetation, compaction and loss of topsoil, development of trails, exposure of tree roots, and streambank breakdown. These impacts, along with vandalism, degrade the appearance of the picnic areas and campgrounds.

In recent years, construction and rehabilitation of recreational facilities has declined because Forest Service budgets have been reduced and some human resource programs have been eliminated. The outlook for the next several years is for no new construction of recreational facilities. Current funding allows little more than minimal operation and maintenance.

In the future, more intensive recreational use will result in further overcrowding, additional site deterioration, greater wear on facilities, and increasing social problems such as vandalism. Eventually some campgrounds will be closed for health and safety reasons while heavily used areas will be operated over a shorter season. This reduction in services will occur just as demand for use of the sites is increasing, due to overall statewide population growth coupled with increased mineral and power developments in the area. Demand for developed recreation sites is expected to exceed supply by the decade 1990 - 2000.

b. Developed Recreation - Private

Developed recreation-private includes group organization camps, outfitter guides, recreation residences and other recreational opportunities provided by private enterprise under special use permits from the Forest Service. Peak use was 18,000 recreation visitor days (RVDs) in 1970 and in 1980 a total of 15,500 RVDs was measured at these sites.

Most existing developed sites are operating at a reduced service management level. Only minor maintenance and rehabilitation efforts are being conducted.

Summer home use on the Forest will remain at a fixed level for the immediate future. No new homesites will be established and no additional permits will be issued. If a ski area is established on the Forest, the proportion of private sector recreation would increase, but total recreational use would rise only slightly.

Since 1970, use of private recreation sites has fluctuated greatly but is expected to remain stable or increase slightly in the next few years and then remain relatively fixed.

c. Dispersed Recreation

Dispersed recreation is recreational use away from developed sites. Opportunities for dispersed recreation on the Humboldt National Forest include: hiking, backpacking, picnicking, camping, gathering forest products, driving for pleasure, fishing, hunting, boating, mountain climbing, swimming, horseback riding, general leisure and sightseeing. Winter dispersed recreation includes cross-country and helicopter skiing, snowmobiling, snow-shoeing, ice fishing, and snow play.

Actual dispersed use and its impacts are difficult to measure and manage. In 1980 the reported dispersed recreational use of the Forest was 347,000 recreational visitor days. Vehicle use, including four-wheel drives and snowmobiles, emphasis on hunting and fishing, and the more common pursuits such as hiking, horseback riding, gathering pinenuts, etc., have all increased in proportion with the population growth. The Wheeler Peak and Ruby Mountain Scenic Areas serve as a magnet to bring outside people into the area.

Dispersed recreation areas receive intense use on weekends and holidays, with areas near water being the most popular. Some groups of Forest users compete for use of recreational areas, such as hikers and motorbikers, snowmobilers and cross-country skiers, and off-road vehicle users and hunters.

Currently, management of dispersed recreation is being conducted at a less than standard level. Maintenance and patrolling of most dispersed sites is done in conjunction with other field activities. Only a minimum amount of trail maintenance work occurs on the Forest annually. Monitoring activities to ensure compliance with existing off-road vehicle plans are minimal.

The capacity of the Forest for dispersed recreation was calculated by using the recreational opportunity spectrum (ROS). The number of acres in each ROS class was converted to recreation visitor days (RVDs).

TABLE II-3: Current Capacity for Dispersed Recreation
Humboldt National Forest

ROS Class	Acres Available	RVD/Acre Conversion Factor	(M)RVD Capacity
Primitive	111,344	0.45	50
Semi-Primitive Non-Motorized	909,948	1.05	955
Semi-Primitive Motorized	1,089,716	2.40	2,615
Roaded Natural	416,762	6.00	2,500
Rural	159	6.00	1
TOTAL	2,527,429		6,121

In the future, demand for all types of dispersed recreation will increase. Total dispersed use is projected to increase to 450,000 recreational visitor days by the year 2030. It is not anticipated that the demand for dispersed recreation will exceed the supply within the planning period. We expect

current patterns of use to continue unless the economy changes drastically or certain technical conditions change unexpectedly.

Total dispersed recreational use will continue to increase annually at a higher rate than for developed recreation.

The increasing loss of wildlife and fish habitat on lands of other ownerships will increase the State-wide importance of the Forest's fish and game. This will cause a rise in hunter and fisherman use which is disproportionate to the overall rise in total dispersed recreation.

Resource damage and use conflicts on dispersed area sites are expected to increase in the future. An increased use of dispersed recreational areas for overflow camping and greater crowding in these areas will increase user dissatisfaction. The quality of the recreation experience will decline. Greatest impacts will be felt in areas adjacent to water.

Mineral development will add miles to the Forest road system. Some of the roads will remain open for public use and travel on the new roads will increase through time. Impromptu parking along the roads in absence of trailhead facilities will create resource problems. Off-road use and inadequately designed roads will impact the soil and water resource.

Opportunities for improving the dispersed recreation experience and reducing conflicts between user groups include:

- Developing a program for trailhead construction.
- Encouraging use at remote sites and discouraging use of heavily used sites.
- Providing adequate sanitation for both summer and winter recreation.
- Developing a program for managing the anticipated dispersed and overflow camping areas.

d. Trails

There are 994 miles of inventoried trails on the Forest. Five miles of trail have been constructed on the Forest since 1977. Most trail use is in the summer, but winter use is increasing.

Most of the trail system has deteriorated badly due to the lack of maintenance. Many of the trails are now almost nonexistent and in some cases present hazards to the users. Maintenance efforts are directed at correcting these hazards but are seldom enough to permanently correct the problem. Conflicts between types of trail users will increase in number and intensity. The ability of the trail system to serve the public will decline while demand continues to increase.

In 1979, two trails on the Forest were established as National Recreation Trails (NRT) under the National Trails System Act. The Ruby Crest NRT on the Ruby Mountain District is 40 miles long; the Wheeler Peak NRT on the Ely District is 10 miles long.

Under the Forest travel management program, certain sensitive and erosive areas and trails are closed to motorized off-road vehicles (ORV) or use is restricted. Ninety percent of the Forest is open to ORVs, but most trails were not designed for use by motor vehicles. Use of motor vehicles is prohibited in the Jarbidge Wilderness Area.

The trail system on the Humboldt National Forest could be improved by constructing new trails or expanding the capacity of the existing trails. The quality of trail-users' experience could be improved by providing better trailhead facilities, better maintenance, trail signs, trail information, and interpretive facilities.

e. Scenic and Special Attraction Areas

1. Lehman Caves - This National Mounument, located on the Snake Division, is administered by the National Park Service where tours are taken daily through one of the largest limestone solution caves in the west. The Forest Service and the Park Service jointly operate a visitor's center in conjunction with the National Monument.

2. Wheeler Peak Scenic Area - This 28,000 acre scenic area contains exceptional aesthetic, botanical and geological attributes. It rises in elevation to 13,063 feet making it the highest point wholly within Nevada. There are two interpretive nature trails within the scenic area. The scenic area also contains large continuous stands of bristlecone pine, considered to be the oldest living thing in the world, some approaching 5,000 years of age.

3. Ruby Mountain Scenic Area - This 40,000 acre scenic area extends along the crest of the Ruby Mountains and is characterized by towering peaks and beautiful, crystal clear alpine lakes. Lamoille Canyon is included within the scenic area and provides spectacular views of the rugged mountain peaks and glaciated canyons.

4. Jarbidge Wilderness - Currently Nevada's only wilderness area, offers rugged, glaciated mountain terrain with 125 miles of trails. In addition to its wilderness qualities the area is known for its exceptional air quality. The area has been designated as a National Recognized Class I airshed by the Clean Air Act.

f. Visual Resources

The Humboldt National Forest is characterized by outstanding scenery with certain areas specifically preserved for enjoyment by Forest users. The Forest's excellent visual range often exceed 200 miles during the long recreation season. Elsewhere visual quality on the Forest has been altered by road building, mining, and vegetative manipulation activities. A Visual Management Program is now used in all resource management projects to maintain and enhance the visual resource.

Demands for and concerns about scenic quality are increasing. Visual quality for Forest lands viewed from recreation sites and major travelways will become increasingly important. Visual resource management techniques

will continue to be applied to all projects in the future, with specific emphasis on those areas identified by the Forest Plan as high in scenic quality or recreation visitor use.

g. Cultural Resources

Currently the Forest has recorded 625 archaeological sites. It is estimated that there may be another 57,000 sites not yet inventoried on the Forest. Cultural resource surveys have been conducted on 20,559 acres. At this time there are no sites on the National Register. Maps of recorded sites are on file at the Toiyabe National Forest Supervisor's Office in Sparks, Nevada. Currently, technical expertise is obtained through the shared services of the archaeologist on the Toiyabe National Forest.

Prehistoric cultural resources in the Great Basin are important because they allow us to reconstruct the lifestyles of the Desert Culture which flourished for over 10,000 years under harsh and extreme conditions. Lithic scatter, rock art, seasonal and permanent base camps provide information on ancient peoples. Historic resources on the Forest contain an important and interesting story of Nevada's early days including mining towns, transportation routes and early exploration and settlement sites.

The Forest completed a draft Cultural Resources Overview in 1983 as part of the Forest Planning process. Work is being targeted for completion of a Forest-wide inventory of cultural resources. If current management direction for cultural resources is followed, the Forest will continue to meet requirements of historic preservation laws, but only minimally.

The Forest has no program for interpreting cultural resources, except for the Mysterious Rock Art Trail on the Ely Ranger District. A plan needs to be developed for the interpretation, protection, and maintenance of known significant sites.

2. WILDERNESS

Currently, the 64,667 acre Jarbidge Wilderness is the only designated wilderness on the Forest and in the State of Nevada. This Federal Class I airshed requires the nation's highest air quality protection. The Roadless Area Review and Evaluation (RARE II) conducted in 1978-79 recommended that four Forest roadless areas be recommended for wilderness, while three areas were recommended for further study. The acres and names are shown below:

TABLE II-4

Areas Recommended for Wilderness During RARE II

Areas Recommended for Wilderness	ACRES
Jarbidge	28,000
Ruby Mountains	64,519
Grant	98,904
Quinn	88,616
TOTAL	280,039

TABLE II-4 Continued

Areas Recommended for Further Study	ACRES
-----	-----
Mount Moriah	97,205
Wheeler Peak	61,869
Highland Ridge	76,017
TOTAL	235,091

The RARE II decision was challenged by the State of California. The legal challenge resulted in a Ninth Circuit Court of Appeals decision that the RARE II Environmental Statement was inadequate. On February 1, 1983, the U.S. Department of Agriculture, after evaluating the court decision, decided that all roadless areas, both those recommended for wilderness and nonwilderness, would be subject to reevaluation through the Forest Plan process. From this reevaluation, wilderness allocations will be proposed in various alternatives of the Forest Final Environmental Impact Statement.

During the public involvement phase of the reevaluation, modification of roadless areas was proposed when ongoing or completed activities had eliminated wilderness characteristics within an area. This resulted in five areas being dropped because of extensive mining activity or because they were too small to be considered for wilderness. Boundary modifications were made in other cases. These adjustments have resulted in 49 areas containing approximately 1,691,271 acres remaining in the roadless category. This represents 63 percent of the Humboldt National Forest.

Refer to Table II-15 of the FEIS for a list of the roadless areas the Humboldt National Forest evaluated during the planning process.

If wilderness legislation for Nevada is passed, the Forest Plan will incorporate the legislative direction.

The existing Jarbidge Wilderness is located in the northern part of Nevada near the Idaho-Nevada State line. Visitor use in the Jarbidge Wilderness has been relatively light in the past. Use has increased from 4,700 RVDs in 1970 to 12,600 RVDs in 1980. The capacity of the wilderness area has not been determined. The Jarbidge Wilderness Management Plan completed in 1983 lays the groundwork for determining the capacity of the area, as well as necessary management to improve the recreational experiences of the wilderness users. A copy of the Wilderness Management Plan is included within the planning process records on file at the Forest Supervisor's Office.

Under the current management level it is assumed that wilderness acreage will remain constant through 1985. After 1985 it is expected other areas on the Forest, including some administratively endorsed wilderness areas, will be added to the National Wilderness System. Demand for wilderness will gradually increase and the present rate of use will double by the year 2010.

3. WILDLIFE AND FISH

The Humboldt National Forest provides habitat for over 325 species of fish and wildlife, predominantly birds (210 species) and mammals (78 species). Twenty-five are designated gamebirds (this includes waterfowl) and five are big game species.

Over half of the mule deer taken by hunters in Nevada each year are harvested on this Forest. Other big game found in huntable numbers are elk, Rocky Mountain bighorn sheep, antelope, mountain goat, and mountain lion. Elk and bighorn sheep have been reintroduced to portions of their former range. Desert bighorn sheep native to the Grant Range exist on or near the northern most extent of their range. Many varieties of upland gamebirds and waterfowl inhabit the Forest. Trout and related species form the fisheries on the Forest.

Two endangered species, the bald eagle and peregrine falcon are winter visitors to the Forest. No critical or essential habitats have been designated for these two species on the Forest. The Forest is presently involved in a cooperative effort with other Federal agencies to reestablish peregrine falcons in eastern Nevada.

The Lahontan cutthroat trout, a threatened species has been identified in 41 streams. The Forest continues to cooperate with the U.S. Fish and Wildlife Service, Bureau of Land Management, and Nevada Department of Wildlife to accomplish actions identified in the approved Lahontan cutthroat trout Recovery Plan. Twenty-three plant species and five fish species, previously mentioned, are classified as "sensitive" by the Regional Forester.

a. Management Indicator Species (MIS)

National Forest Management Act regulations have directed the National Forest to identify management indicator species. One purpose of this designation is to manage for the needs of one species that is representative of a given habitat situation and thereby manage for the habitat needs of numerous other species. A second purpose of this designation is to recognize the habitat requirements of species that need special protection. Threatened, endangered and sensitive species, economically or socially important species, species that have special habitat needs, and other species are considered for this designation.

Criteria Used to Select Management Indicator Species:

- (1) They are an economically and socially important species.
- (2) The species is relatively easy to monitor; they have high visibility and adequate numbers.
- (3) The species is found in all areas of the Forest.
- (4) They are somewhat representative of all wildlife species which use the vegetative type.
- (5) The species is sensitive to changes in habitat and acts as a barometer to the condition and trend of vegetative types.

(6) Specific vegetative types provide key habitat for the species during its life cycle.

Table II-5 provides the vegetative type in which the selected management indicator species occur.

TABLE II-5
Selected Management Indicator Species for
the Humboldt National Forest

Species	Vegetation Type
Mule deer	All vegetative types
Sage grouse	Sagebrush-grass, riparian
Goshawk	Old growth cottonwood, aspen and fir stands associated with riparian areas
Trout	Riparian

Table II-6 provides the different population levels for MIS on the Forest. The trout information within the table includes Lahontan cutthroat trout.

TABLE II-6
Various Population Levels for MIS on the
Humboldt National Forest

Species	Population Levels		
	Minimum Viable	Current	Maximum Potential
Mule deer	11,247	63,000	88,200
Sage Grouse	3,900	36,300	40,000
Goshawk	500 Pairs	500 Pairs	1,000 Pairs
Trout	2,470 Pounds	45,900 Pounds	125,000 Pounds

As can be seen in the above table the current and minimum viable population levels are the same for goshawk. The Nevada Department of Wildlife believes that current levels equal minimum viable populations for goshawks.

b. Habitat Diversity

Ten vegetative communities used by terrestrial wildlife species extend from the salt desert shrub to alpine areas. These vegetative communities are used either singly or in combination depending upon the needs of each species.

Diversity of vegetation is generally good with better diversity for wildlife in the northern half of the Forest compared to the southern half. Representative diversities are as follows: northern half with 36 percent grass, 14 percent forb and 50 percent shrub; southern half with 20 percent grass, 6 percent forb and 74 percent shrub. Plant diversity on the southern

half is not expected to change significantly under current management; however, diversity on the northern half needs to be maintained with a vegetative manipulation program to prevent large catastrophic fires or long term encroachment of any single species such as sagebrush.

c. State Agency Objectives

The Forest is cooperating with the Nevada Department of Wildlife in achieving the Department's goals and objectives for the selected management indicator species. Their broad goals and objectives are to maintain or improve habitats for all wildlife species. The Department is currently in a planning process that somewhat parallels the Forest's. Their plan has been incorporated into the Forest Plan.

d. Wildlife Use

The current user days generated by the wildlife and fish resource is 171,042 days per year. Since Nevada has a controlled system of big game hunting, it is difficult to project user days in to the future. During the past four years the user days have increased about 20,000 annually. This trend is expected to continue through 1990 then level off.

e. Habitat Improvement

The Forest has a small budget for wildlife and fish habitat improvements and annually accomplishes about 600 acres of wildlife habitat improvement and six wildlife and/or fish habitat improvement structures. This trend is expected to continue if funding remains consistent with present levels.

4. RANGE

The Humboldt National Forest ranks first in the Intermountain Region and sixth in the nation in producing forage for livestock.

The Forest's 199 grazing allotments encompass 1,322,610 acres (53 percent of the Forest) of suitable range for livestock and provide about 310,000 animal unit months (AUMs) yearly.

Grazing management is shared between the Forest Service and the grazing permittees. The Forest issues grazing permits that specify the type and number of livestock and the season of use. Allotment Management Plans outline the use and development of each allotment on a long-term basis and Annual Operating Plans outline annual direction. Allotments are inspected by the Forest Service for use, condition, and compliance with grazing permits, the Allotment Management Plan, and the Annual Operating Plan. The permittee is responsible for managing his livestock and for maintaining improvements on the Forest allotment.

Livestock operations are largely dependent on Federal range to graze cattle and sheep on the Humboldt National Forest. There are 18 permittees grazing 59,089 sheep for an average of 3,300 sheep per operation. Another 181 permittees graze 53,688 head of cattle for an average of 270 head per operation. Most of the grazing is summer use.

Range conditions of the suitable range is as follows:

TABLE II-7
Range Condition Class

Total Acres	Percent of Suitable Acres	Condition Class
217,747	16	Good
615,150	47	Fair
499,713	37	Poor

The trend for good condition ranges is generally static while the trend is usually upward on fair and poor condition ranges.

Current management direction for the range resource is to develop upward trends where the range is in less than good ecological condition and to maintain a static trend for good condition range. Also, emphasis is placed on obtaining management on each allotment as prescribed in the Allotment Management Plan to coordinate forage production with other multiple use values. This includes proper livestock rotation from unit to unit on schedule and obtaining proper use of the forage resource. Emphasis is also placed on the proper maintenance of range fences and water developments so that effective management systems can be continued.

Allotment Management Plans have been approved and implemented on 90 percent of the 199 grazing allotments at this time. All of the allotments on the Forest will have approved plans by 1988. There may be some downward adjustments in stocking levels on some of the allotments which do not yet have approved plans.

Range improvements to date include the reseeding of 72,328 acres of formerly depleted rangeland, construction of 1,500 miles of fence for controlling livestock, and installation of 1,300 water developments and 139 miles of pipelines to carry water to formerly dry range areas. These improvements also provide forage and water for big game animals.

Through the use of Range Betterment Funds, the Forest will continue to treat approximately 2,000 acres of vegetation annually. Management fences and water developments will be installed to continue rangeland improvements.

Five wild horse territories have been designated on the Forest. A joint Forest Service/BLM Management Plan has been approved for the Monte Cristo wild horse territory. Management plans have also been completed on the Murphy Wash and Cherry Springs territories; plans are scheduled for completion by 1986 on the Quinn and Mt. Moriah territories. The horses will be managed under the Wild Horse and Burro Act (PL92-195) of December 15, 1971.

TABLE II-8
Status of Wild Horse Territories
Humboldt National Forest

Territory	Mgmt. Plan Completion	No. Horses Inventoried (1981)	Mgmt. Plan Stocking Levels
Monte Cristo	1977	130	72-96 head
Quinn	1986	10	0
Mt. Moriah	1988	0	0
Murphy Wash	1978	0	0
Cherry Spring	1977	38	42-68 head

There have been no sightings of horses since 1977 on the Mt. Moriah or Murphy Wash territories. Surveys on the Quinn territory indicated an estimated 10 horses inhabit the area.

Range conditions on most of the wild horse territories have improved since management and control were initiated. The Monte Cristo territory has not improved due to the number of horses that occupy the area.

There is a national demand for wild horses mostly from the scenic and historical aspect. However, most people recognize the need to keep wild horse numbers within the limits prescribed by the management plan.

Noxious weeds known to grow on the Forest are hoary cress (whitetop) (Cardaria draba), leafy spurge (Euphorbia esula), Canada thistle (Cirsium arvense), musk thistle (Carduus theomeri), Scotch thistle (Onopordum acanthium), and dalmatian toadflax (Linaria dalmatica). All of these noxious weeds pose a real threat to the productivity of the land.

The Forest treats approximately 20-100 acres of noxious weeds per year, mostly along roadsides. Many ranchers in cooperation with their respective counties treat noxious weeds on private lands. However, there are serious problems in many areas adjacent to the Forest boundary where private land owners may not be aware of the threat or may not be financially able to treat large acreages.

The Forest supports the A.P.H.I.S. predator control program including making recommendations to A.P.H.I.S. for each allotment as to the need for control, methods to be used, and special precautions needed. The Forest Service evaluates the environmental effects of the predator control program. The current control program has consisted of trapping and shooting of coyotes from aircraft during the winter. Aerial shooting is used in conjunction with summer trapping in areas where livestock losses to predation are extremely high and summer control alone has not been effective. Control efforts are directed to problem areas as outlined in the Annual Operating Plan prepared by the Forest and A.P.H.I.S. In areas where mountain lions are the target species control efforts are directed at the offending animal. Losses of livestock to predators varies from year to year.

Demand for cattle grazing will remain high and exceed available supply. Demand for sheep grazing may decline further but over the long term should stabilize and may eventually increase.

5. TIMBER

The 1963 timber inventory identified approximately 1,003,350 acres of woodland cover type on the Forest outside the Jarbidge Wilderness and the Wheeler Peak Scenic Area. This acreage included roughly 29,100 acres of productive Engelmann spruce, subalpine fir, and limber pine located in isolated stands at higher elevations, and almost 530,250 acres of pinyon-juniper considered to be potentially manageable for the production of a variety of miscellaneous forest products. The remaining forested area, about 444,000 acres, was comprised of noncommercial stands of Engelmann spruce, subalpine fir, and limber pine, and pinyon-juniper areas which at the time were considered to have little if any potential for the production of forest products. Because of limited access, low productivity, the scattered and isolated location of the stands, and the absence of milling and processing facilities in the area, all timber on the Forest is classed as unsuitable for industrial wood production.

The public's consumptive use of wood products from the Humboldt National Forest is generally miscellaneous forest products consisting of fuelwood, Christmas trees, pinenuts, post and poles. Demand in fuelwood, in comparison to other wood products has seen the largest increase in recent years. Demand is greater than supply in some areas. However, it is estimated that only a small percentage of the Forest's potential sustained yield pinyon-juniper fuelwood capacity is currently being utilized. About 4,000 cords of fuelwood are harvested annually from July through October. Approximately 600 posts are cut from juniper stands on the Forest each year generally for local use by ranchers. A slight rising demand trend is forecast.

Approximately 2,000 Christmas trees are harvested annually during November and December with pinyon pine the dominant species harvested. The limited timber stand improvement program releases Christmas trees for harvest later.

The supply of pinenuts depends on the pinyon-pine cone drop which can vary from a few thousand pounds to a bumper crop of 100,000 pounds or more per year. Bumper crops usually occur every 3-5 years. Commercial demand for this product exceeds supply despite production levels achieved.

Demand for the Forest's products is good, however, a better inventory of the pinyon-juniper type is needed.

Although public use of miscellaneous wood products should increase in the future, this expected use will be moderated by the increasing costs associated with acquiring these products.

6. WATER

The Humboldt National Forest manages mountain watersheds to produce clean water while providing for the production of woodland products, recreation, grazing, and wildlife.

The Forest has three municipal watersheds: West Ward supplying the town of Ruth; Duck Creek supplying the town of McGill; and Bear Creek supplying the town of Jarbidge. Bear Creek watershed is closed to grazing, camping and off road vehicle use. Murray Canyon is managed as a special watershed for flood protection for the town of Ely and it is closed to grazing and off road vehicle use.

The Forest yields approximately 1.4 million acre-feet of water. Yield varies with annual precipitation and is dependent on the annual snowpack. Spring snowmelt contributes the majority of runoff volume.

Opportunities for water yield augmentation on a large scale are extremely limited. Vegetative manipulations in sagebrush-grass types may produce small, localized effects; however, these would probably be undetectable downstream.

The present demand for water exceeds the available supply. Part of the imbalance between supply and demand is due to the timing of runoff. The demand for storage and transmission facilities to better use spring runoff will increase.

Most of the water from the Forest meets or exceeds state water quality standards and is suitable for irrigation and stockwatering. Sediment production is an identified but unquantified problem in many drainages.

It is Forest Service policy to file, in the name of the United States, for all water rights needed to support the proper use and management of National Forest administered lands, and to quantify and secure instream flow needs (maintenance of stable stream channels and fisheries habitat) for National Forest purposes based on the Organic Act and Multiple Act purposes. The Forest has and will maintain an active program in identifying, quantifying and filing for the necessary water rights. Much of the water produced by the Forest is used for downstream irrigation. Water rights of others developed on Forest land and used downstream are recognized and respected. Water rights and federal water use will continue to be controversial. The schedule of adjudications and the filing backlog will take several years to complete.

Riparian areas and wetlands make up a small percentage (less than one percent) of the Humboldt's total acreage. The relative value of these small scattered riparian areas far exceeds that of the surrounding lands. Better management has resulted in maintained or improved riparian condition in many areas. However, approximately, 25 percent of these areas remain in poor condition. Public demand for better management of riparian areas becomes more apparent each year.

7. MINERALS

a. Mineral Land Suitability

(1) Availability

The Humboldt National Forest is almost entirely open to mineral entry and leasing. The following table lists the restrictions.

TABLE II-9
Lands Open and Withdrawn to Mineral Activities on
Humboldt National Forest

District	Total Acreage	Withdrawn from Mining	Wilderness Areas With- drawn from Mining	Total Lands Open to Mining and Leasing
Mountain City	479,215	1,715	--	477,500
Ruby Mountains	361,233	1,289	--	359,944
Jarbridge	240,159	1,352	64,667	174,140
Ely	1,178,829	1,613	--	1,177,216
Santa Rosa	268,493	200	--	268,293
TOTAL	2,527,929	6,169	64,667	2,457,093

From the figures presented in Table II-9 there are 70,836 acres on the Forest withdrawn from mineral entry. This leaves 2,457,093 acres or 97.2 percent of the Forest open to mineral entry. Reserved and outstanding mineral rights on the Humboldt National Forest total 30,325 acres or 1.2 percent of the Forest.

Only 243 acres are legally withdrawn from mineral leasing, leaving 2,527,686 acres or 99.9 percent of the Forest open to mineral leasing.

(2) Capability

The Forest Service does not determine which areas are capable of mineral or energy production. Capability is determined by industry which responds to trends in the market place. Present technology and economics preclude extraction of some known mineral deposits. Mineral uses and needs are determined by new or existing technologies and by demand based on the need for certain minerals within the market place. The difficulty in predicting where new mineral deposits may be found leads to the conclusion that areas capable of mineral or energy exploration and development may someday include the entire Forest.

(3) Suitability

For locatable minerals, lands open to mineral entry have not been restricted. In most areas protective stipulations are added to operating plans to provide for environmental protection.

Oil and gas leasing on the Forest has been addressed in environmental assessments and special stipulations are added to leases to protect surface resources. In recent years congress has prohibited the expenditure of funds to process and issue mineral leases and certain permits within RARE II areas recommended for Wilderness designation, allocated to further planning or congressionally designated as Wilderness Study Areas.

Development of oil and gas may be further restricted by limitations stated in the Application for Permit to Drill (APD) to protect the resources.

b. Current Management Direction

The policy of the Forest is to integrate the development of mineral resources with the use and conservation of other Forest resources.

The Mining Law of 1872 consolidated earlier laws and established the rights of citizens to explore, claim, and mine certain minerals wherever they are found on public domain lands, including those within the National Forest System unless closed by withdrawal. The minerals covered by this law are called locatable minerals. Congress removed certain minerals from the jurisdiction of the 1872 law and made them leasable minerals under the Mineral Leasing Act of 1920, the 1947 Mineral Leasing Act for Acquired Lands and the 1955 Multiple Surface Use Act. The Materials Act of 1947 and the 1955 Mining Act gave the Forest Service the authority to sell certain common minerals (sand, gravel, and similar materials) called "saleable minerals".

All minerals owned by the United States available for exploration and development are subject to disposal under one of these three categories - locatables, leasables, or saleables.

For locatable minerals, any person proposing to conduct operations that might significantly disturb a surface resource must file a Notice of Intent with the District Ranger.

Permits, licenses, or leases for leasable minerals (oil, gas, coal, geothermal, phosphate) are issued by the Department of the Interior. The Forest has an opportunity to perform environmental analysis, recommend action, list stipulations, and propose requirements for rehabilitation. On acquired lands, the Forest Service has authority to deny permits, licenses, and leases.

Saleable minerals are managed by the Forest Service. Permits are issued for use of these materials in accordance with Forest Service policy.

Reclamation of disturbed areas in the case of locatable minerals is mandated by 36 CFR 228.8.f. & g. A reclamation plan is to be included as a part of the operator's plan of operations, stating specifically what is to be done to reclaim the area of disturbance. Both the operating plan and reclamation plan are developed through discussion and negotiation between the operator and the forest Service in order to minimize the impact to surface resources.

The Forest Service District personnel have been increasing their knowledge of reclamation possibilities and procedures. Forest Service reclamation specialists from the Regional Office in Ogden, Utah and from the Forest Service Intermountain Research Station provide technical assistance to District personnel regarding reclamation.

Each reclamation plan must be specifically designed for proposed operation and the surface resources which are impacted. Bonding for reclamation performance is then computed to cover the costs necessary to accomplish the work detailed in the reclamation plan. Bonding dollar amounts are determined by quotes from local "dirt contractors", costs derived from Forest Service cost estimating guides and costs experience based on recent reclamation projects.

Section 228.8, "Requirements for Environmental Protection" uses the terms; "to minimize adverse environmental impacts," "where feasible," "take all practicable measures" and "where practicable." Regional and National Forest Service policy/guidance indicates that reclamation requirements must be "reasonable" and should be commensurate with the degree of impact on the surface resources.

Reclamation plans for leasable and salable commodities should be included as a part of the permit for those categories.

c. Current Situation

Locatables

Two major mines are currently operating on the Forest, the Jerritt Canyon and Taylor mines, producing approximately \$103 million per year in gold and silver, based on 1981 prices for these commodities. Extensive exploration activity is occurring for locatable minerals with the primary targets being gold, silver, molybdenum, barite, tungsten and copper. There were approximately 125 mining and exploration operations on the Forest during 1982. Major areas of interest are the Mountain City and Ely Ranger Districts.

Table II-10 lists active mines presently in production on the Humboldt National Forest.

Table II-10
Active Mines on the Humboldt National Forest

Mine	Metal	Production/Remarks
Jerritt Canyon	Gold	Freeport Minerals Co. Annual production of 200,000 oz. At 1981 average of \$458.90 oz, this comes to \$91,780,000/year.
Taylor	Silver	Silver King Mine, Inc. - Annual production 1,000,000 oz. At 1981 average of \$11.00/oz, this comes to \$11,000,000/year.
Treasure Hill	Silver	Unknown/open pit - heap leach.
Diamond Jim	Silver	Unknown/open pit - underground mill ore with lead.
St. Elmo	Gold	Unknown/underground - mill ore.
Blue Jacket	Silver	Unknown/open pit and underground on F.S. and patented - mill ore.
Duzer Creek	Gold	Unknown - Placer gold/one man.

Other small operations produce some gold, silver, and barite.

By 1987, it is estimated that these mines will produce approximately \$151.5 million per year in gold and silver. It is also likely that at least one more large operation will open within the next five years and several small producers. This estimate is based on present exploration activities and developments.

There are approximately 20,000 mining claims on the Humboldt National Forest for a total of approximately 421,000 acres. This amounts to 17 percent of the Humboldt National Forest. Table II-11 summarizes the mining claims on the Humboldt National Forest.

TABLE II-11
Mining Claims on the Humboldt National Forest

Ranger District	Number of Claims
Mountain City	10,282
Jarbridge	369
Ruby Mountains	564
Santa Rosa	587
Ely	<u>8,230</u>
TOTAL	20,032

Leasables

Presently, oil and gas activities on the Humboldt National Forest consist of various types of geophysical surveys, such as seismic surveys. Geothermal exploration activities are limited to nonsurface disturbing geophysical surveys.

There are 304,159 acres of National Forest currently under oil and gas leases, and 3,331 acres leased for geothermal resources. A total of 307,500 acres or 12 percent of the Forest are leased with an annual rental fee of \$1.00 per acre, paid to the U.S. Treasury. Many more acres are pending issue for various reasons. Approximately 50 lease applications were processed during 1982.

Most of the Forest is classified as "Lands Valuable for Oil and Gas" except the extreme tops of the Snake and Grant Ranges, the Ruby Mountains, East Humboldt and Santa Rosa Ranges and part of the Mountain City District.

Geothermal leases (3,331 acres) have been issued in the Ruby Valley Known Geothermal Resource Area (KGRA). Geothermal exploration activity will increase but not to such a great extent to cause major impacts on time and personnel. The Mountain City District north of Wildhorse has lands classified as "Prospectively Valuable for Geothermal Resources". A smaller area at the north end of the Schell division is also classified as "Prospectively Valuable for Geothermal Resources".

No other areas are classified as valuable for other leasable resources such as coal, potassium or sulfur.

Common Varieties

Extensive deposits of sand/gravel and building stone exist on the Forest. Demand for common variety minerals produced on the Forest is low. Most ranches, towns and government entities in close proximity to the Forest have their own pits or quarries. The Forest Service is usually the largest user of gravel materials for road maintenance. An on-going and used rock quarry exist on the east side of the Moriah Division in the Hendrys and Hampton Creek areas which is privately operated.

d. Expected Future Condition - Locatables

Growth in activities related to mineral and energy during the past five years has been at the rate of approximately 20 percent per year. Exploration activity for hard rock minerals such as gold, silver and barite is expected to continue to increase, but at a more moderate rate, perhaps 5-10 percent per year. As mineral exploration companies evaluate targets on Forest lands during the next 5-10 years, the number of operating plans should peak and then level off as targets are rejected.

The output in dollar value from mines is estimated to be 115 million for 1984. Production is extrapolated in millions of 1983 dollars as follows:

TABLE II-12
Production Value of Locatable Minerals

1981	1982	1983	1984	1985	1986- 1990	1991- 2020	2011- 2030
28	61	100	115	130	150	163	82

These figures reflect the probable production assuming no new mines open. However, it is likely new mines will open over the years as more targets are explored. There is no direct return to the treasury from hard rock mining. The increase in local economies and taxes, both local and income taxes, does provide a sizeable return to government entities.

Exploration activity tends to concentrate around the old mining districts. New theories of ore deposition are leading to exploration, development and production activities in areas which were formerly considered to have low potential. Mineral potential on the Humboldt National Forest is: 25 percent of the Forest is in areas with demonstrated economic mineral production and favorable geologic indicators; 55 percent of the Forest includes areas with known mineralization, possibly some production and favorable geologic indicators; 20 percent of the Forest is in areas that have no known production and few or no favorable geologic indicators.

Especially significant exploration areas are:

Area	Exploration Target

Mountain City District:	
Independence Range	gold, barite
Wildhorse Reservoir--north	gold, silver, copper, molybdenum tungsten, uranium
Ely District:	
White Pine Range	gold, silver, molybdenum, tungsten
Quinn Canyon Range	molybdenum, tungsten, copper, gold, silver
Schell Creek Range	gold, silver
Snake Range	beryllium, tungsten, silver
Ruby Mountain District:	
Ruby Mountains	gold, silver

Maps showing the mining district mineral occurrences, mining claim distribution, active mines and mineral potential are available in Humboldt National Forest planning process files.

Demand is likely to exceed the supply of minerals in the future.

e. Expected Future Condition - Leasables

Over the next few years we will see an increase in leases and permits associated with oil and gas exploration activity as industry expands their exploration efforts into Nevada.

Recent discoveries in northern and eastern Nevada are generating renewed interest in the Great Basin. This activity should continue for at least ten years while Nevada is being evaluated.

Based on present knowledge and concepts of oil and gas formation and entrapment, few wells will likely be drilled on the Forest. There are no areas with high potential for oil and gas accumulation, due to the mountainous, structurally complex and faulted nature of the ranges which comprise forest lands. It is still possible, though, that new concepts and exploration methods will enable operators to find oil and gas in these mountain ranges.

The Mountain City District could become a major target for geothermal exploration since it lies within an area of very high regional heat flow and is on the trend of the Midas Trench/Battle Mountain High. This trend extends from near Reno, northeast to the Yellowstone area. There are several hot springs within the Mountain City District. The trend also extends through Jarbidge District.

Demand for energy resources is likely to continue and possibly increase.

Demand for geothermal resources may increase during the next five years for power generation. Power generation applications will probably not become a dominant geothermal use for 10-15 years.

E. SUPPORT ELEMENTS

1. PROTECTION

a. Fire

The Humboldt's fire management program is a coordinated interagency effort involving Federal and State agencies. The overall Forest objectives are to immediately respond to and suppress all wildfires in a timely manner. The only exception to this policy is the occasional lightning-caused fire in high elevation, rocky areas where safety considerations preclude aggressive direct attack. In these cases surveillance has been the appropriate action. The Forest has no approved fire management areas. From 1970 to 1979 an average of 19 fires occurred annually; 27 percent of which were human caused. The human caused fires accounted for 73 percent of the 3,925 acres burned annually. Although the annual burned acreage has been high, resource damage has been low.

A cooperative agreement with the Nevada Division of Forestry (NDF) covers initial attack responsibilities on the Mountain City, Ruby Mountain and Jarbidge Ranger Districts. An agreement between the BLM and Ely District provides for assuming attack responsibilities on certain lands normally administered by the other agency. A similar agreement exists between the BLM and Santa Rosa District.

The Forest does not have any fire lookouts for detection purposes. Most of the Forest is visible from surrounding private land. Occasionally aerial flights are used following severe lightning activity. Fuels management is not a major concern on the Forest, due to the lack of heavy fuels. Prescribed burning is conducted for benefits to range and wildlife.

Human caused fires can be expected to increase as recreation visitor use increases, although long-lasting negative effects are not expected. Periodic large fast-moving fires will probably increase unless prevention efforts are strengthened.

b. Air Quality

The Humboldt National Forest manages the Jarbidge Wilderness as a Class I airshed. This area has some of the least impaired air quality in the nation. The Forest's air resource management objectives for this wilderness area include:

(1) Affirmatively protect the Class I air quality related values (AQRV) to include visibility and effects from atmospheric deposition.

(2) Review and respond to Prevention of Significant Deterioration (PSD) air quality permit proposals affecting the area to prevent or mitigate deterioration of the air resource.

(3) Comply with Federal and State air quality regulations.

(4) Determine the AQR's, identify sensitive receptors, and determine limits of acceptable change in the Jarbidge Wilderness.

(5) Monitor sensitive air resource receptors to assure that the intents of the Clean Air and Wilderness Acts are met.

(6) Cooperate with Federal, state, and local air quality regulatory agencies.

(7) Determine adverse impacts to Class I airsheds.

The remaining lands of the Forest are managed as Class II airsheds, as designated by the Clean Air Act of 1977. Air resource management objectives for these areas are:

(1) Conduct resource management activities to comply with Federal, State, and local air quality regulations.

(2) Maintain and, where cost effective, improve the air quality.

(3) Consider air quality standards in all resource management activities.

(4) Monitor effects on air quality from forest and range management activities, including smoke management.

(5) Include Interagency Smoke Management guidelines (NFES No. 12789) when developing prescribed fire projects.

(6) Ensure that Forest cooperators and contractors comply with established air quality regulations.

c. Insect and Disease

Forest pests have a direct and significant impact on Forest resources. Areas particularly affected include recreation sites, timber stands, and rangelands. The principal insects and diseases affecting the Forest are grasshoppers, Mormon crickets, black grass bugs, rangeland caterpillar, Douglas-fir tussock moth, fir engraver beetle, pinyon needle scale, dwarf mistletoes, root rots, and pests of pinyon seeds.

The Forest has numerous developed public use areas such as campgrounds and picnic areas. Tree hazard reduction programs are utilized to safeguard the public and protect the natural resources at these sites.

Infestations of grasshoppers and Mormon crickets, although cyclic in nature, can cause devastation to localized rangelands. In some cases 50 percent of the annual forage production can be consumed thus reducing available forage for livestock and wildlife. The control of grasshoppers and Mormon crickets is the responsibility of Animal Plant Health Inspection Service (APHIS).

Since the Forest does not have a suitable timber base, pest control will generally be confined to developed recreation sites, rodent control in meadows and grasshopper control in cooperation with APHIS.

d. Law Enforcement

The Forest Service is responsible for enforcing Federal laws and regulations on the National Forest. This responsibility cannot be delegated to other agencies or local law enforcement entities. The Forest maintains a law enforcement program that encourages public compliance with laws and regulations through signing, personal contacts and the media; and provides for protection and safety of Forest users through cooperative agreements with Elko and White Pine Counties.

The Forest's major areas of concern in law enforcement activity are man-caused fires, vandalism, theft of government property and forest products, off road vehicle violations, trespass, theft of campground fees and alcohol and drug related problems associated with large group gatherings.

Property cases involving theft and vandalism at government facilities are due in part to remoteness and easy access. It is anticipated that these types of incidents and other law enforcement problems will increase with the growth of the general population.

2. Lands

a. Ownership

When the Humboldt National Forest was established there were considerable acreages of lands in other ownership within the Forest boundary. This was mostly as homestead and mining patents, and checkerboard railroad grants. Land ownership adjustment activity has been moderate in the past because of uncertain funding for purchase and lack of exchange funding.

The general policy is to consolidate National Forest lands within existing National Forest units with emphasis on acquiring lands in those areas where present National Forest lands constitute an appreciable proportion of the area; and through exchanges to dispose of tracts classified as suitable for exchange purposes. Such land usually include isolated tracts, detached parcels, or projected narrow strips of National Forest lands, except those which include special public values.

Land ownership adjustments for private and government agencies are expected to increase in the immediate future.

b. Classification

Special classification of land often restricts resource uses and may affect objectives for land acquisition or disposal. Only 153,468 acres in the Humboldt National Forest are in special classifications listed below:

TABLE II-13
Special Land Classification

	ACRES
Existing Wilderness (Jarbidge)	64,667
Scenic Areas	
Ruby Mountains	40,000
Wheeler Peak	<u>28,000</u>
Subtotal	132,667
Research Natural Areas (undetermined)	N/A
Withdrawals That Affect Disposal	
Administrative/Recreation Sites	6,529
Power/Irrigation Projects	512
Mountain City Municipal Watershed	6,080
Jarbidge Municipal Watershed	<u>7,680</u>
Subtotal	20,801
GRAND TOTAL	153,468

New withdrawals contemplated are those to be specified in new wilderness legislation pertaining to mineral entry, site-specific withdrawals for administrative sites, or other major investment areas such as developed recreation sites that must be protected. The withdrawal review schedule is as follows:

WITHDRAWAL REVIEW SCHEDULE

District	BLM#	#	Name	Targets FY 86
1	N-044346	3		3
2	N-054588	1	Agee	1
	N-044346	2		2
3	N-044346	1		1
4	N-016774	<u>9</u>		<u>9</u>
		16		16

The intermingled public and private lands within the boundary of the Forest plus the fact that some units of the Forest are almost completely surrounded by private land without rights-of-way (ROW) have resulted in many access problems. These problems are becoming more critical as demands for the use of public land increase. The current emphasis is to acquire ROWs where access problems are the greatest. Private landowners are reluctant to grant ROWs to the Forest Service unless there is a significant benefit to the landowner. When a ROW is in the public interest and the property owner is unwilling to grant an easement, the right of eminent domain can be used.

The Forest presently acquires three rights-of-way (ROW) annually. The current emphasis is to acquire ROWs where access problems are the greatest.

Presently there are 223 nonrecreational special uses and 27 recreation permits of various types on the Forest. There is an average of about ten new cases per year. The following is a summary of the existing (1983) special land use permits on the Humboldt National Forest.

TABLE II-14
Summary of Special Land Use Permits

Kind of Use	Total Cases	Total Miles ROW Length	Total Acres Permitted Area
Recreation	27	0	66
Agriculture	11	4	479
Community	5	1	5
Industrial	4	0	29
Research, Study, Training	12	0	108
Transportation	46	105	334
Utilities Communication	69	154	1,943
Water	<u>76</u>	<u>664</u>	<u>437</u>
TOTAL	250	928	3,401

Requests for the various special uses will increase substantially in future years. Accommodating the proposed uses will become more difficult without conflicting with other Forest management activities.

c. Research Natural Areas

The Forest at the present time has no areas classified as Research Natural Areas (RNA). However, there are five sites that have been inventoried as candidate Research Natural Areas:

(1) Mt. Washington Bristlecone Pine Stand

Approximately 260 acres located in portions of Sections 11 and 12, T.12N., R.68E., Mount Diablo Baseline Meridian (MDBM). This area is located in White Pine County, Ely Ranger District. A principal feature is a stand of old bristlecone pines, which can be used to build chronologies through tree-ring research. Also present are stands codominated by litter and bristlecone pines, typical of subalpine forests in the east-central Great Basin.

(2) White Pine Peak

Approximately 670 acres located in portions of Sections 20, 28, 29, 32 and 33, T.12N., R.58E., MDBM. The peak is located in Nye county, Ely Ranger District. The principal feature of this area is a "native rangeland", consisting of sagebrush-grass communities in nearly pristine condition, which are scarce in the Great Basin. Also present are small stands of white fir and of limber pine/bristlecone pine. This area is important in providing an area suitable for conducting research on high elevation sagebrush sites.

(3) Sietz Canyon

Approximately 980 acres located in portions of Sections 20, 21, 28, 29, 32 and 33, T.32N., RR.58E., MDBM. The canyon is located in Elko County, Ruby Mountain Ranger District. This area features a rich and diverse floral component. Many types of plant communities are present, including riparian wetlands, subalpine herb and shrublands, and alpine herblands. The canyon also exhibits metamorphic rock types and effects of alpine glaciation, neither of which are common in the Great Basin. This area is important in providing a site for conducting riparian classification and management research.

(4) Jack Creek Crater

Approximately 250 acres located in portions of Sections 26 and 27, T.46N., R.58E., MDBM. The crater is located in Elko County, Jarbidge Ranger District. The principal feature is a stand codominated by whitebark pine and subalpine fir, neither of which is well represented in the Great Basin. Small riparian communities are also present.

(5) Pearl Peak

Approximately 640 acres located in portions of Sections 3, 4, 9 and 10, T.27N., R.57E., MDBM. The peak is located in Elko County, Ruby Mountain Ranger District. Its principal features are ungrazed sagebrush-grass types at middle and lower elevations, and a limber pine/bristlecone pine woodland at upper elevations. Some of the bristlecones may be very old, and thus useful for dendrochronological research.

3. Soils

The soils within the Humboldt National Forest vary considerably depending on landform, geology, vegetation, and geomorphic processes. The Forest is located primarily in the Basin and Range physiographic province with a large variety of parent materials present. These geologic units include hard and soft sedimentaries, metamorphics, igneous, and volcanic rock types.

Broad associations exist between vegetation communities and soils on the Forest. These are as follows:

a. At low elevations light colored, low vegetation potential soils support pinyon-juniper woodland types with low and black sagebrush understories. Such areas possess moderately high soil erosion hazards and provide limited opportunities for intensive range, wildlife and watershed management.

b. Tall sagebrush communities exist over all elevations on dark colored soils with moderate production potentials. These soils vary considerably in their suitability for intensive resource management dependent primarily upon steepness of slope, texture and rock content. Soil erosion hazards are generally moderate on these soils.

c. Mountain brush and aspen communities occur at mid to high elevations on dark colored, high production soils, with low to moderate soil erosion hazards. Opportunities for range, wildlife and watershed management are excellent on such soils.

d. Coniferous vegetation types are found on high elevation, light colored, low production potential soils. Soil erosion hazards are usually low in this vegetation type, however removal of overstory cover can result in significant increases in soil erosion.

The primary objective of soil management of the Forest is to match management activities to the capability and suitability of the soil to assure long-term soil quality and productivity. A secondary objective is to use soil information in such a way that cost effective decisions can be made with respect to ongoing management practices, i.e., vegetative manipulation, site reclamation, etc. These objectives can best be met through a knowledge of soil properties and variability obtained through soil inventories.

A broad level reconnaissance soil survey (Order 4) has been completed for most of the Forest. However, this level of inventory is too broad for most management needs. A more detailed soil survey (Order 3) is currently underway with a target completion date for the Forest of 1995. Information obtained from this level of survey as well as site specific documentation derived from project support services, will help meet the objectives of soil management.

Continuing concern by the public to maintain the productivity of the soil will require increased management emphasis on maintaining soil productivity and quality. The quantification of the soil resource through soil inventory and monitoring will have to be made, in order to keep pace with this demand.

4. Facilities

The Humboldt National Forest has numerous facilities including roads, bridges, administrative sites, buildings, dams, and water systems. They require considerable time and money for operation and maintenance. There has been investment in these facilities to enable the development, protection, and use of Forest resources.

Transportation

The most important part of our transportation system is the road network, comprised of over 3,000 miles of arterial, collector and local roads. Arterial and collector roads provide access to large segments of the Forest and generally serve multiple resource activities. Local roads generally are shorter roads usually serving single resource activities.

Two arterial and collector roads have been evaluated and designated as Forest Highways. These two roads are the Steptoe Creek-Duck Creek Road, Forest Highway 23, and the Harrison Pass Road, Forest Highway 24. A third proposed route being evaluated but not yet designated as a Forest Highway is the Jarbidge Road.

The majority of roads needed by the Forest are already in place. The only arterial or collector road construction needed is a short piece on the Santa Rosa District. New local road construction needs vary considerably by area and resource activity.

Few of the roads have been maintained at their assigned level of maintenance due to funding constraints. Therefore, maintenance activities have been concentrated on arterial and collector roads with emphasis on reduction of safety hazards and resource damage prevention. Many of the roads are not at the standard necessary for the safe, efficient, and economical transportation of people and goods. Also, many of the roads have deteriorated to the point they are difficult to drive on and difficult and expensive to maintain. Extensive reconstruction is needed through the network, but particularly on the arterial and collector roads, to bring the roads up to the desired standard and make the roads maintainable at the proper level.

There are 38 road bridges, three trail bridges, and five major culverts on the Forest bridge inventory. Ten of the road bridges are considered inadequate for Forest needs. These ten bridges have been scheduled for replacement in the Regional Bridge Replacement Program for completion by Fiscal Year 1987.

There are 24 fixed-wing airfields on the Forest Airfield Inventory. Little information is available on the condition and adequacy of the airfields on the inventory.

The trail system is described in the Recreation section.

Administrative Sites, Buildings and Support Facilities

There are 106 major buildings inventoried on the Forest which include offices, dwellings, barns, warehouses, workshops, and various storage sheds on 20 administrative sites. Administrative sites should be evaluated as cultural property as stated in goal number 10 on page IV-3.

Existing buildings were constructed from the 1930's to the present, with the majority built in the late 1950's and early 1960's. Some buildings are in poor condition and do not meet all applicable state and local building and

health codes. Water and sewer systems serving the buildings and administrative sites also do not all meet applicable standards. Many of the buildings and associated water and sewer systems need to be renovated or replaced to function efficiently and economically.

There are 35 dams on the Forest Dam Inventory. Twenty-seven of the dams are owned and inspected by the Forest Service, seven are under special use permits and inspected by the Forest Service, and one is owned by the Bureau of Indian Affairs and inspected by the Bureau of Reclamation.

The majority of the dams are small and low hazard and none have serious safety problems at present. Many of the Forest Service and special-use permit dams are in need of more maintenance and, in some cases, reconstruction or improvements to prevent major problems from developing.

The Forest communication system consists of the commercial phone system and 145 various items of radio equipment, such as personal portables, mobile units, base stations, and repeaters. Communication between offices is expensive and radio communication between offices and field personnel is erratic. A more efficient and cost effective system of communication between offices and field personnel is badly needed.

5. CORRIDORS

a. Highways

Major highway corridors serving the Forest have been identified. Part of this inventory is included within the arterial and collector road network. The rest of the inventory is major state, county, and federal transportation routes. As mentioned earlier, two of these major state and county highways have been proposed for reconstruction and improvement under the Forest Highway Investment Program.

b. Utilities

The term "corridor" applies to any form of energy transportation (electric transmission, pipeline or combination) that is the primary use of the land. Of all the new utilities proposed to be constructed on the Forest, all but two are along existing utility rights-of-way and transportation corridors. The Forest has worked with representatives of the Western Utilities Group to identify future needs for utility corridors. All but one of the corridors is along existing utility rights-of-way or transportation corridors. Field studies have been made to determine if the requested corridors are feasible. In some instances they were reduced in size due to topographic constraints. Only one requested corridor was rejected. This occurred when the Bureau of Land Management determined alternate routes were preferable.

6. Human and Community Resources

The Humboldt National Forest is committed to the program of human and community development, which has as its primary objective, helping people and communities to help themselves. The program includes activities that provide work and learning experiences for youth, adult employment, training opportunities, and technical assistance to individuals and communities.

The Forest is actively engaged in a variety of human resource programs. A summary of the major programs is as follows:

Senior Community Service Employment Program (SCSEP). The Forest has been an active participant in this program, and its predecessor, Operation Mainstream, for many years. There are currently 12 enrollees, 55 years of age or older who meet low income requirements specified by the Department of Labor.

Volunteers in National Forest Program. This program provides the means whereby the Forest may legally accept and utilize the service of volunteers and at the same time provide training and individual work experience to these people. The volunteers are integrated into regular programs and perform work in recreation, range, wildlife and engineering projects. The number of volunteers on the Forest is on a steady rise.

Stay-in School. This program is for economically disadvantaged high school students. We currently host two youth in this program and could host more if ceilings were to be made available.

The Forest has hosted Young Adult Conservation Corp (YACC), Youth Conservation Corp (YCC), and Comprehensive Employment Training Act (CETA) Programs and will continue if and when such programs are funded.

The demand for Human Resource Program enrollees is high on the Forest. Because the use of the programs expands the dollar efficiency of outputs, the Forest will utilize the program whenever available. The supply of potential enrollees is also great, particularly with the youth programs.

F. NEED TO ESTABLISH OR CHANGE MANAGEMENT DIRECTION

The Analysis of the Management Situation noted areas where management direction should be changed or direction established. Twelve areas have been identified.

The purpose of this section is to discuss those areas in which, from our analysis, we have determined that we must either change management direction or establish direction that is currently lacking.

Recreation

The Forest seems to have enough developed camping capacity for the immediate future but the more heavily used sites must receive stronger emphasis on maintenance and rehabilitation. Vegetation management plans should be developed for all heavy use sites to identify projected needs and to help in maintaining those developed sites in as safe and as aesthetically pleasing condition as possible for the public.

Seek opportunities at popular developed sites to provide interpretive signing, overlooks, trails and brochures designed to help visitors understand the forest environment, management practices and their

responsibilities towards care of the Forest. Use interpretation and information approaches to help dispersed recreationists understand the consequences of their actions and their responsibility for environmental care.

With the continued increase in dispersed recreation, emphasis must be given to providing more management attention to dispersed sites. This additional monitoring is necessary both to prevent accelerating resource damage and to provide for public safety. The existing trail system should be reconstructed and the level of maintenance on all trails must be increased.

Identify and provide protection for cultural and historic sites.

Wilderness

Continual increases in wilderness use dictate the need for more trailhead facilities. Many trails in the Jarbidge area grew up over game trails. A general rerouting of several trails is now needed for public safety. Increased maintenance must be given to all trails.

There is a need to increase the management of the Jarbidge Wilderness to protect the wilderness resource. This can be done partially through increased public education.

Revise the eastern boundary of the Jarbidge Wilderness to exclude an existing road and provide a more definable line.

Timber

Although most, if not all of the pinyon/juniper type, may currently be "unsuitable", it should be recognized that there is considerable potential for managing this resource for posts, poles, Christmas trees, pinenuts, etc. However, the degree of management opportunities will require an inventory of the resource.

Wildlife

Our analysis shows a need to increase the monitoring of wildlife and fish habitats and populations. Increase the Forest's wildlife expertise in order to fully implement our wildlife habitat management program. There is a need to provide greater emphasis to the T&E program.

Range

Our analysis shows a need to increase emphasis in followup management of intensive grazing systems and adjust stocking where justified. We need to insure that revegetation projects serve more than a single purpose.

There is also a need to improve the overall condition of the Forest's riparian areas.

Water

There is a need to increase the emphasis on water quality sampling in order to monitor the effects of Forest activities. We also need to increase the emphasis on reduction of sediment and damage to riparian areas. Install headcut structures to stabilize gullies.

We need to develop or update management plans for municipal and special watersheds, and develop and implement additional guidelines for management activities in riparian areas, wetlands, and floodplains.

The water uses and needs inventory should be updated and corrected and we need to acquire water rights at an accelerated rate.

Minerals & Geology

Our analysis shows a need to provide for the anticipated increase in minerals activity. We also need to automate all lease filings for better records of issuances and expiration.

Lands

Many former public access roads have been closed to public use and need to be reopened either by the counties declaring them public roads, or if this fails, by Forest Service purchase or as a last alternative condemnation.

Our analysis shows a need to increase emphasis on land exchange and ROW acquisition. We will complete only those ROW cases for new access where road construction money is assured within a reasonable time. An increased Land Line Location program, where occupancy trespass is suspected or occurring, is also needed.

Facilities

The overall Forest road system is deteriorating. Increased emphasis on maintenance, reconstruction, and surfacing are priority items which will increase cost efficiency of the overall program. More emphasis is needed on sign rehabilitation and upgrading. For greater efficiency, more flexible standards are needed in the application of the sign program.

For long-term cost savings, construct rather than rent our administrative facilities. After the initial investment is fully amortized the cost savings would be significant. Increased emphasis on construction, reconstruction and maintenance of existing facilities is needed for health and safety reasons. At remote stations, use trailer houses where cost efficient.

We also need to increase, improve and enhance the telecommunications system.

Protection

Our analysis shows a need to increase the awareness of insect and disease conditions on the Forest, and a willingness to implement integrated pest management techniques and strategies into resource decisions and activities as applicable.

Soils

Our analysis shows a need to provide detailed soil surveys for vegetative manipulation projects. We also need to improve the knowledge of soil productivity potential and tolerance erosion limits.

Public Information and Interpretation

There is a need to seek opportunities in cooperation with other agencies to better inform the public of resource management activities and to improve public participation in protecting facilities and environmental values.

G. RESEARCH NEEDS

The Humboldt lacks sufficient information in vegetation management to adequately manage its nonforested lands. Research that has been completed in other areas cannot be extrapolated to the Humboldt due to our unique weather patterns. The higher elevation sagebrush types have a predominance found no where else. Our own research has concentrated on watershed, pinyon-juniper, and shrub research. The University of Nevada has completed most of their research on low elevation ranges. We have the following research needs:

1. Riparian classification and management strategies.
2. Management strategies for pinyon-juniper.
3. High elevation sagebrush ecological sites (those above pinyon-juniper) needs, physiology, antecology, synecology, and management strategies.
4. Development of bitterbrush and mountain mahogany regeneration necessary to maintain or enhance the quality and quantity of critical wildlife habitat.
5. Continue Lahontan cutthroat trout research.

Table II-15 Current Outputs, Projected Demand and Supply Potential

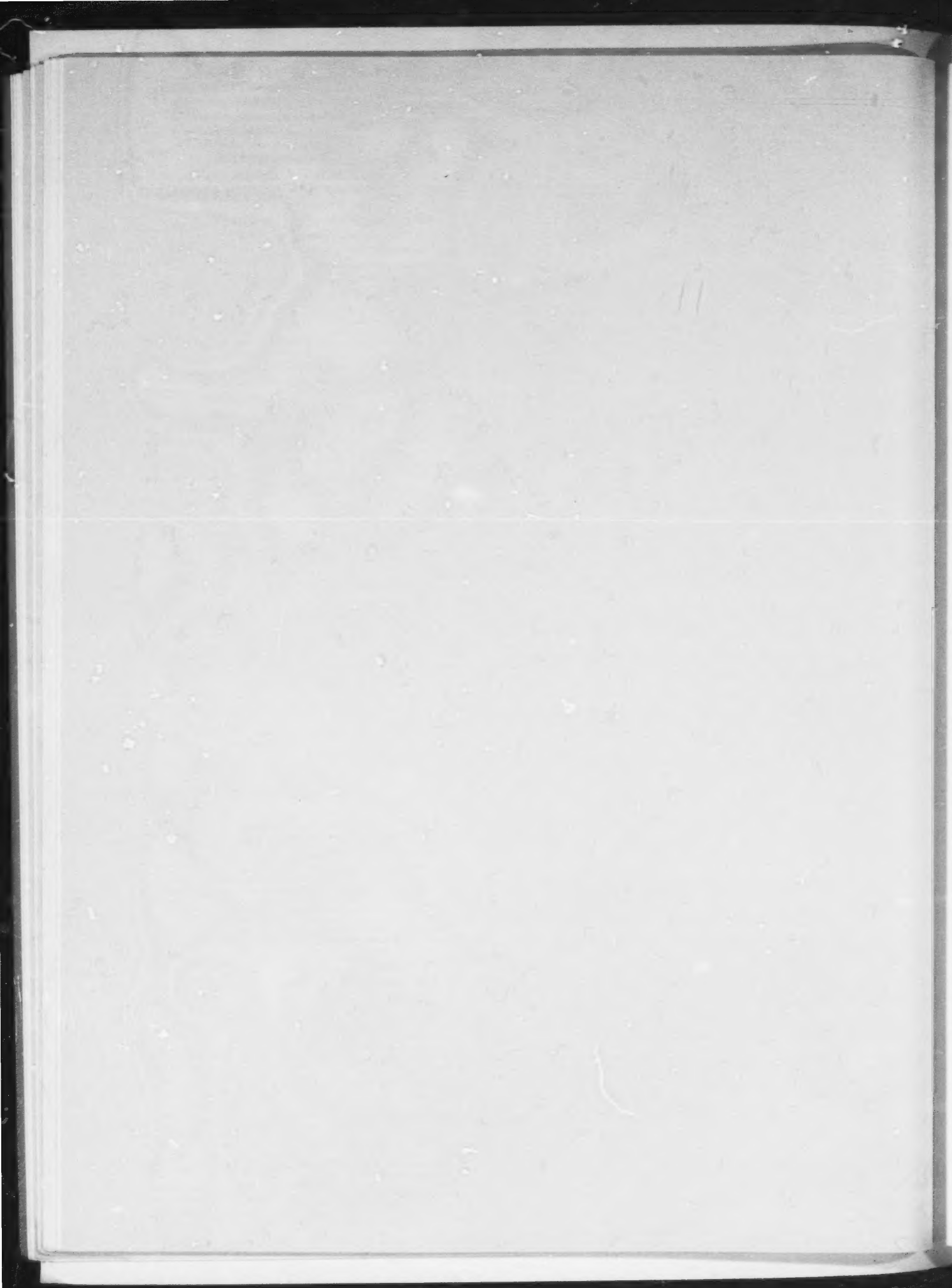
Activity-Category	Units	1986 1990	1991 1995	1996 2000	2001 2010	2011 2020	2021 2035
DEVELOPED RECREATION	MRVDS						
Demand		237.0	275.0	280.0	295.0	310.0	375.0
Maximum Use		229.9	241.9	253.8	264.1	268.9	280.0
Current Use		194.0	194.0	191.8	188.6	186.9	189.7
Forest Plan		204.2	203.7	205.0	202.3	201.1	204.9
RPA Alternative		230.1	241.6	253.8	264.1	268.9	280.0
DISPERSED RECREATION	MRVDS						
Demand		350.0	410.0	440.0	500.0	550.0	600.0
Maximum Use		429.3	458.9	468.6	489.5	503.9	519.9
Current Use		399.5	419.4	427.1	440.9	452.8	466.3
Forest Plan		386.9	401.6	409.9	426.1	439.2	452.6
RPA Alternative		419.2	455.1	465.5	489.8	505.1	521.9
WILDERNESS	MRVDS						
Demand		202.8	233.0	239.0	254.1	263.2	273.3
Maximum Use		202.8	233.0	239.0	254.1	263.2	273.3
Current Use		68.2	77.2	78.8	80.5	82.0	83.5
Forest Plan		37.3	39.5	40.6	41.6	42.6	43.7
RPA Alternative		24.5	31.7	32.0	32.3	32.7	32.8
WILDLIFE	MWFUDS						
Demand		149.6	150.8	152.3	154.2	156.0	157.5
Maximum Use		149.6	150.8	152.3	154.2	156.0	157.5
Current Use		149.5	149.7	149.8	150.1	150.1	150.4
Forest Plan		149.5	149.7	150.1	150.7	151.3	151.3
RPA Alternative		149.6	150.0	150.8	151.8	152.7	153.5
PERMITTED LIVESTOCK USE	MAUMS						
Demand					DEMAND FOR GRAZING PERMITS IS ELASTIC (1/)		
Maximum Use		304.1	309.2	315.7	326.8	332.6	334.0
Current Use		299.3	293.3	294.2	296.9	301.6	303.4
Forest Plan		301.7	298.7	300.9	305.8	312.4	315.1
RPA Alternative		304.1	309.2	315.7	326.8	332.6	334.0
FUELWOOD	MCORDS						
Demand					DEMAND FOR FUELWOOD IS ELASTIC (1/)		
Maximum Use		6.6	6.8	6.8	6.9	6.9	7.0
Current Use		4.4	4.5	4.5	4.5	4.5	4.5
Forest Plan		5.0	5.2	5.2	5.3	5.3	5.4
RPA Alternative		6.5	6.8	6.8	6.9	6.9	7.0

1/ - Elastic demand means that there is a demand for all that the Forest can produce.

III.

**Plan Responses
to Issues,
Concerns and
Opportunities**





CHAPTER III

PLAN RESPONSES TO ISSUES, CONCERNS, AND OPPORTUNITIES

This chapter shows how the Final Plan addresses and responds to major public issues, management concerns and resource opportunities that have been identified during the planning process.

A discussion of the process used to identify the issues to be resolved in this Plan is found in Appendix A of the accompanying Appendix document for the Plan. Additional information may be found in the public involvement records of the Humboldt National Forest.

The specific methods for resolving and implementing management actions for the nine issues dealt with are found in Chapter IV of this Plan. In that chapter the Forest's multiple-use goals and objectives are listed, as are the multiple-use prescriptions and associated standards and guidelines for each management area. Included with the management area discussion are the proposed and probable management practices.

The responses to the nine issues are as follows:

- ISSUE 1 - Resolve the Wilderness/Nonwilderness question for roadless areas on the Humboldt National Forest. The following are recommended for inclusion by Congress into the National Wilderness system: Mount Moriah, Bristlecone, Ruby Mountains, Grant Range, East Humboldt, Soldier Lake and Jarbidge Additions. These areas will be managed and operated at the full service level. All other roadless areas will be managed for uses other than wilderness.
- ISSUE 2 - How should the Humboldt manage wildlife habitat? Current habitat of threatened and endangered species will be improved and no conflicts from other uses will be allowed. The quality of aquatic habitats will be maintained in at least satisfactory ecological condition. Big game winter range will be improved. Habitat of hunted MIS will be improved. An estimate of 152,721 WFUDs will be produced by the end of the planning horizon.
- ISSUE 3 - How should the Humboldt manage its mineral management program? The numbers of leases, permits and operating plans is expected to increase slightly throughout the life of the plan. However, withdrawals and legislative requirements may constrain mineral development on 339,278 acres. The Forest will be able to evaluate leases and operating plans throughout the planning period which is estimated at 234 annually.

- ISSUE 4 - How should the Humboldt manage the grazing resources? The Humboldt will strive to bring livestock numbers into balance with available grazing capacity. This will be accomplished through livestock adjustment and improved management strategies which increase grazing capacity. The requirements of sensitive plants will be provided for in all activities. Wild horses will be managed according to the numbers specified in approved territory plans. Noxious weeds will be treated to reduce threats of invasion into rangelands. Impacts to riparian areas will be reduced because of improved management direction specified in allotment management plans. Predator control will be allowed using approved methods where a need is demonstrated. Range condition is expected to improve to 82 percent of the suitable range being in satisfactory ecological condition.
- ISSUE 5 - How should the Humboldt manage off-road vehicles? The travel plan established on the Forest will remain the same. An exception would be necessary if wilderness legislation is enacted on the areas specified in issue No. 1.
- ISSUE 6 - How should the Humboldt manage the water resource program? Water quality will improve through the planning period because of improved management and coordination with other resources. However, there will be small localized areas where watershed improvement projects will be necessary. Water rights for National Forest purposes will be filed through the appropriate Nevada State Water Law. Federal reserved instream flow needs relating to favorable conditions of water flow will be quantified.
- ISSUE 7 - How and where should the Humboldt provide public access? Public access will be provided into consolidated National Forest lands in conjunction with the Sorenson, Jones, Peavey and Morgan Land Exchanges. Attention will be directed towards acquiring additional public access into the Ruby Mountains and the East Humboldt division. The goal is to acquire two ROWs per year Forest-wide.
- ISSUE 8 - How should we manage areas of special interest on the Humboldt? The following areas are recommended as Research Natural Areas: Mt. Washington Bristlecone Pine, White Pine Peak, Sietz Canyon, Jack Creek Crater, and Pearl Peak. The areas are isolated from uses and activities that are occurring on the surrounding area at the present time. The Wheeler Peak and Ruby Mountains Scenic Areas, along with historic and prehistoric sites are other special interest areas. These areas will receive the necessary protection for their special values.
- ISSUE 9 - How should the Humboldt manage riparian zones? Standards and guidelines to resolve this issue are found in the Forest-wide section in Chapter IV of this plan. Activities and uses will be designed to minimize impacts to riparian areas. All allotment management plans will address riparian concerns.

The following two issues were identified as a result of public comment on the Draft Plan.

ISSUE 10 - How should we manage recreation on the Humboldt? Maintenance and reconstruction of existing facilities will allow us to manage developed sites at full service level. Trail construction will increase slightly. Opportunities for dispersed recreation will be increased and improved in quality.

ISSUE 11 - How should the Humboldt manage bristlecone pine? Standards and guidelines have been strengthened which provide direction to protect bristlecone pine.



IV.

Forest Management Direction



11

CHAPTER IV

FOREST MANAGEMENT DIRECTION

A. INTRODUCTION

The Forest Plan provides the long-range management direction for the Humboldt National Forest. Direction is the guidance Forest personnel will use to achieve the results the Plan outlines. This chapter, by outlining that direction, will inform the public and other agencies about future programs.

Chapter IV includes:

- Forest management goals and objectives
- Forest-wide standards and guidelines
- Projected outputs and budget requirements
- A description of the desired future condition of the Forest
- Management area direction
- Forest Action Schedules

Tables in this chapter display resources and activity outputs for a 50 year period. All information shown for periods beyond the first decade are estimates of potential only and are not planned or programmed. Actual programmed accomplishment beyond the first decade will be set through subsequent Forest Plan revisions.

B. FOREST MULTIPLE-USE GOALS AND OBJECTIVES

Goals and objectives define the direction of Forest-wide management. Goals are broad definitions of what will be achieved, while objectives are aimed at achieving those goals. By implementing the Forest Plan, the goals and objectives are translated into on-the-ground results.

RECREATION

Goal #1

Provide a broad range of outdoor recreation opportunities for all segments of the public.

Goal #2

Maintain existing developed site facilities.

Objectives

- a. Bring the condition of developed recreation facilities to condition classes 1 or 2 by 1995.
- b. Conduct green tree hazard analysis surveys every five years in developed sites.
- c. Provide picnic opportunities adjacent to communities.

- d. Regulate the opening and closing dates of facilities to serve the public in an efficient and economical manner.
- e. Develop and implement a vegetative management plan for each developed site. Give priority to heavily used sites.
- f. Develop O&M plans for all water and sanitation systems.
- g. Develop management objectives for each developed site as part of the site operation and maintenance (O&M) plan that describes the "standard" (Full FSM, and less than standard RSM) levels of service.
- h. Conduct potable water sampling as required by the State and manual direction.
- i. Complete safety and maintenance inspections of developed sites and necessary corrective action prior to opening the site for public use.

Goal #3

Encourage private enterprise to develop desired recreation opportunities adjacent to the Forest.

Goal #4

Provide a broad spectrum of dispersed recreation opportunities.

Objectives

- a. Develop and implement a self-guided interpretive trail in Lamoille Canyon by 1986.
- b. Cooperate with other agencies to develop dispersed recreation opportunities (e.g. snowmobile trails etc.).

Goal #5

Increase emphasis on management of dispersed recreation opportunities.

Goal #6

Provide a trail system adequate for administrators, permittees (including livestock) and the recreating public to travel to and within the National Forest both summer and winter.

Objectives

- a. Maintain the trail system consisting of approximately 1,000 miles of summer trail.
- b. Program Trail Construction Funds to reconstruct or construct one mile of trail annually and to replace one bridge every five years.
- c. Build trailhead facilities at trail right-of-way access points as needed.

d. Maintain at least one "on the shelf" trail construction/reconstruction project.

e. Prepare trail maintenance plans for each District.

Goal #7

Provide a system of managed cross-country ski and snowmobile trails with adequate trailhead facilities.

Goal #8

Provide opportunities for the use of motor vehicles where they will not unacceptably impact Forest resources or unnecessarily impact other Forest users.

Objectives

a. Review the travel plan annually and revise as necessary. The most current revisions will become a part of the management direction for the Forest Plan.

b. Monitor ORV use.

Goal #9

Provide for a pleasing visual landscape in the Humboldt National Forest.

Goal #10

Identify, protect, interpret and manage significant cultural resources.

Objectives

a. Complete an inventory of all cultural resources within the areas of the Forest identified as having a high potential by 1990.

b. Evaluate and, if appropriate, nominate the following as Historic Sites for the National Register by 1990:

- White Pine Wickiup Site
- Mahoney Ranger Station
- Belmont
- Smith Creek Caves
- Pioche Stage Stops
- All Administrative Buildings
- Jarbidge Wilderness Mining Claims
- Osceola Ditch
- Quinn Springs Stage Stop

c. Develop a plan for the interpretation, protection, and maintenance of known cultural resource sites.

Goal #11

Preserve the natural ecosystems in the proposed Research Natural Areas.

Objectives

- a. Protect sites proposed as Research Natural Areas while they are being considered for designation and following designation.
- b. Return proposed Research Natural Area (RNAs) to multiple use management if they are not designated as RNAs.

Goal #12

Coordinate recreation programs with local, county, state and other Federal recreation agencies.

WILDLIFE AND FISHERIES

Goal #13

Improve the quantity and quality of lake and stream habitats through increased coordination with other land use programs, cooperation with Nevada Department of Wildlife, and direct habitat improvement.

Objectives

- a. Improve the Forest aquatic habitat data base for project and land use planning by completing aquatic inventories on all streams by 1995.
- b. Provide aquatic habitat analysis input for range allotment plans and updates, recreational developments, and road constructions annually. Also provide input on non Forest activities that affect the Forest such as dam construction, hydro-power developments, and water rights adjudications.
- c. Improve habitats through developing an average of 20 structures annually during the period from 1986 - 2036.

Goal #14

Improve the current productive level of wildlife habitat with emphasis on maintaining or improving limiting factors such as big game winter ranges (measured in acres), in cooperation with Nevada Department of Wildlife.

Objectives

- a. Provide wildlife habitat analysis input for range allotment plans and updates.
- b. Complete by 1990 and then update annually on a site specific basis the big game habitat use inventories for all seasonal habitats on the Forest.
- c. Develop a sagebrush management strategy that incorporates sage grouse, antelope, and deer habitat requirements, livestock forage improvement objectives, and soil-vegetation potentials by 1990.

d. Maintain forage cover ratios on deer winter ranges within pinyon-juniper type through coordinating fuelwood management with big game winter range use.

e. Implement habitat improvement projects as outlined within the Forest Action Schedule.

f. Acquire lands needed for improving limiting factors such as big game winter range when possible.

g. Consider reintroductions of indigenous wildlife and fish species where vacant niches have been identified and conflicts with other resources can be resolved.

h. Establish and maintain desert bighorn sheep range and numbers.

Goal #15

Manage classified species* bald eagle (E), peregrine falcon (E), Lahontan cutthroat trout (T), Bonneville cutthroat trout (S) habitat to maintain or enhance their status through coordination with other land use programs, agency cooperation, and direct habitat improvements.

Objectives

a. Cooperate with the Nevada Department of Wildlife in the re-establishment of the peregrine falcon by 1990.

b. Investigate the opportunities to establish native Bonneville cutthroat trout into historic habitats and implement actions in coordination with the Nevada Department of Wildlife by 1995.

c. Cooperate with the Nevada Department of Wildlife to re-establish native Lahontan cutthroat trout into historic habitats as outlined in the approved "Lahontan Cutthroat Trout Fisheries Management Plan" by 1993.

d. Give priority to structural habitat improvement work for Lahontan and Bonneville cutthroat trout.

RANGE

Goal #16

Manage all allotments to maintain suitable range presently in satisfactory ecological condition, and improve suitable range that is in less than satisfactory condition.

Objectives

a. Develop improved management systems for all allotments by 1988.

b. Develop grazing systems which include periodic rest, where possible.

* [E = Endangered, T = Threatened, S = Sensitive]

Goal #17

Produce a sustained yield of forage on all lands available and suitable for livestock grazing while maintaining or enhancing the productivity of the land.

Objectives

- a. Develop an acceptable balance between the available grazing capacity and livestock numbers through proper monitoring of allotment management plans, to insure that resource objectives are met.
- b. Complete vegetative treatment projects that are prescribed in allotment management plans that are compatible with other resources and are cost effective.
- c. Complete coordinated resource management plans where private lands, BLM lands and other Federal lands can be managed in conjunction with National Forest System lands.

Goal #18

Manage livestock to recognize the special needs relating to wet meadows and riparian areas, and fisheries habitat.

Objectives

- a. Emphasize proper range management techniques that will improve livestock distribution.
- b. Utilize the latest research information available in designing and implementing grazing systems.
- c. Fence developed springs or small wet meadows that cannot otherwise be protected.
- d. Consider conversions from sheep allotments to cattle allotments only after careful consideration of these areas through an environmental analysis process.

Goal #19

Reduce conflicts between livestock and wildlife for forage on key winter ranges.

Goal #20

Manage the Cherry Springs, Monte Cristo, and Quinn Wild Horse Territories in accordance with the Wild Horse and Burro Act and the approved territory plans.

Goal #21

Maintain sensitive plant species.

Goal #22

Cooperate with the Animal Plant and Health Inspection Service (APHIS) in controlling range pests that could devastate rangelands.

Goal #23

Support predator control program by making recommendations on the need for control, methods to be used, and special precautions needed and by evaluating the environmental effects of predator control.

Goal #24

Emphasize the control of priority 1 noxious weeds.

Objectives

- a. Cooperate with counties in the treatment and control of noxious weeds.
- b. Re-treat those areas where priority 1 noxious weeds have not been eliminated and concentrate new treatment on those areas posing the greatest threat.

TIMBER

Goal #25

Harvest woodland products in coordination with other resources and provide for integrated pest management. The long-range objective is to manage wood products in an orderly long-term manner.

Goal #26

Promote the utilization of fire-killed trees, chainings, and green pinyon-juniper through an aggressive firewood program.

Objectives

- a. By 1995, harvest 200 cords of green hardwood annually for firewood or other products. Initially, offer at least 50 cords per year.
- b. Develop a personal use firewood program that will provide 5,000 cords annually through the first two decades.
- c. Design sales of green softwoods to accomplish silvicultural, fuel management, wildlife, and other resource management goals.
- d. Open pinyon-juniper areas planned for type conversion for greenwood cutting prior to chaining or burning.
- e. Utilize the temporary roads concept to provide access to fuelwood not available by the existing road system.

Goal #27

Manage aspen and other hardwoods to provide for a limited supply of fire wood, other Forest products, wildlife benefits, and stand rejuvenation.

Goal #28

Determine the management potential of the pinyon-juniper cover type by conducting an inventory to identify management needs and opportunities and productivity levels, and subsequently identifying acceptable harvest levels.

SOIL AND WATER

Goal #29

Provide water and soil resource input to other resource activities to protect or improve water quality and soil productivity.

Objectives

- a. Identify and adopt soil and water conservation measures applicable to the Forest.
- b. Comply with state water quality standards during land management activity.
- c. Conduct hydrologic analysis on municipal watersheds and develop management plans where needed.

Goal #30

Inventory the soil and water resources of the Forest to develop interpretation of resource potential for management.

Objectives

- a. Complete an order-three soil survey for the Forest by 1995 in cooperation with the National Cooperative Soil Survey Program.
- b. Complete a water resource inventory on critical watersheds by 1995.

Goal #31

Quantify and secure instream flow needs for National Forest purposes, including favorable flows of water based on the Organic Act and Multiple Use Act purposes.

Objectives

- a. Continue the water uses inventory for the Forest.
- b. Secure instream flows of perennial streams and springs needed for maintenance of riparian and aquatic habitats.

Goal #32

Design and implement practices on-the-ground that will re-establish acceptable soil, hydrologic, and vegetative conditions which are sufficient to secure and maintain favorable water flow.

Objectives

- a. Return degraded riparian ecosystems to their natural condition through completion of inventoried watershed restoration projects and implementation of grazing systems.
- b. Give priority to problem areas in high value watersheds and where accelerated erosion exists or erosion is rapidly increasing.

Goal #33

Identify habitat types on the Forest to assist management decisions concerning resource use.

Objectives

- a. Quantify plant community potentials in conjunction with the Forest soil survey program.
- b. Cooperate with agencies collecting habitat and range site information.

Goal #34

Develop a water quality monitoring plan of operation for the Forest.

Objectives

- a. Quantify plant production potentials on range benchmark sites with soil/ climate data.
- b. Quantify soil loss tolerance levels on major soil types for different management activities.
- c. Establish water quantity and quality monitoring on critical watersheds.
- d. Initiate monitoring of soil and water resources to determine resource potentials for management.
- e. Initiate development of a water quality monitoring plan of operation for each management area.

MINERALS

Goal #35

This goal was deleted because it was a duplicate of Goal #40.

Goal #36

Administer the mineral resources of the Humboldt National Forest to provide for the needs of the American people and to protect and conserve other resources.

Goal #37

Respond to operating plans within the regulated time frames and provide for environmental protection.

Objectives

- a. Protect surface resources as much as possible and reclaim as soon as possible.
- b. Provide environmental assessment documents for smaller operators and act as third-party contract monitor on large operations.
- c. Process operating plans according to the 36 CFR 228 regulations and followup with compliance checks.
- d. Expedite the exploration and development of minerals resources for the needs of the public within environmental constraints.

Goal #38

Expedite oil/gas and geothermal activities.

Objectives

- a. Evaluate exploration permit applications and administer those permits issued (seismic and other methods).
- b. Evaluate and forward recommendations through the Regional Forester to the Bureau of Land Management (BLM) for oil and gas lease applications.
- c. Evaluate and forward recommendations through the Regional Forester to BLM for geothermal lease applications.
- d. Process oil/gas and geothermal lease applications through the S.O. and District Offices as quickly as possible.

Goal #39

Reduce the backlog of oil and gas lease applications.

Objectives

Evaluate and forward recommendations to BLM for oil and gas lease applications held in suspense due to RARE II or other reasons.

Goal #40

Integrate the exploration and development of mineral and energy resources with the use and protection of other resources. Use special stipulations identified in Appendix H for mineral leases.

Objectives

- a. Provide for Forest Interdisciplinary Team input on exploration, development and extraction plan proposals.
- b. Complete mineral evaluations for land cases and development projects in a timely manner.
- c. Administer sales and free use of common variety minerals as needed.
- d. Evaluate existing withdrawals in accordance with FLPMA and Bureau of Land Management regulations by 1986.
- e. Initiate mineral withdrawals needed to protect National Forest surface resources and areas of high investment (e.g. - Administrative Sites, Research Natural Areas, developed campgrounds etc.).

LANDS

Goal #41

Achieve the land ownership best suited to managing the resources of the Humboldt National Forest.

Objectives

- a. Utilize Nevada Receipts Act funds to purchase lands within critical watersheds to prevent serious soil and erosion problems and minimize the chance of damaging floods.
- b. Program to accomplish one land exchange per year to improve land ownership patterns and reduce management costs, with emphasis on those cases of 1,000+ acres.
- c. Complete the Ruby Mountain BLM/Forest Service interchange.

Goal #42

Locate and mark National Forest boundaries, with emphasis on areas where encroachment is suspected or may occur.

Objectives

- a. Survey and post at least one mile of property line annually.

Goal #43

Provide access to National Forest lands needed for public use, permittee activities and administration.

Objectives

- a. Program to acquire two road or trail rights-of-way annually.

Goal #44

Allow nonrecreation private structures where private land is not available and the applicant demonstrates through the environmental analysis process that National Forest is the best location for the structure and that unacceptable impacts can be avoided.

Objectives

- a. Process applications for amendments and transfers of existing permits within six months.
- b. Process new special use requests within one year.

Goal #45

Protect National Forest lands from trespass and undesirable occupancy.

Objectives

- a. Develop and implement a monitoring system to identify occupancy trespass by 1986.

FACILITIES

(Including Communications)

Goal #46

Manage Forest radio and communication system in accordance with the Forest Communications Plan.

Objectives

- a. Provide a radio and communications system adequate to insure efficient, Forest-wide communications.
- b. Have Forest microwave system operable by 1995 field season.
- c. Have Forest land mobile radio system updated by 1995 field season.
- d. Have a distributed processing system (FLIPS) operational by 1987.

Goal #47

A management program will be developed for the operation and maintenance of administrative sites, buildings and work centers needed for the economical and efficient administration of the Forest.

Objectives

- a. Correct health, safety, and sanitation deficiencies at all sites by the year 1990.
- b. Have approved site plans for all facilities by the year 1990.

Goal #48

A road management program will be established to develop and maintain a safe, economical, functional and environmentally sound transportation system that serves the resource elements.

- a. Complete condition surveys and establish design criteria of all collector and arterial roads by the year 1995.
- b. Complete development of a road management program by the year 1990.
- c. Reconstruct five miles per year of the arterial and collector road system starting in 1991.
- d. Concentrate road maintenance efforts on arterial and collector roads and those local roads critical to resource management needs. Maintenance priorities are:
 - (1) User safety.
 - (2) Control of erosion and environmental problems.
 - (3) User comfort.

PROTECTION

Goal #49

Develop a well-planned and executed fire protection and fire use program that is cost efficient and responsive to land and resource management goals and objectives.

Objectives

- a. Annually update the following Fire Management Action Plans to have the appropriate level of fire readiness:
 - Aviation Operation and Safety
 - Initial Action Programs (run cards)
 - Reinforcement Actions
 - Fire Tools and Caches
 - Manning and Specific Action Plans
 - Annual Mobilization and Operation Plan

b. Provide advice to rural communities about fire protection and prevention and control programs of Cooperative Forestry Assistance Act.

c. Include provisions in all permits and use authorizations for fire prevention and suppression.

d. Emphasize cooperative fire protection to provide for joint fire protection through offset agreements, paid protection and combined fire force.

Goal #50

Through cost-effective analysis, develop an active fire prevention program with cooperating agencies that is directed towards specific areas and causes based on probability of occurrence, damages expected and program costs.

Objectives

All fire danger warnings or restriction notices will be removed no later than five days after the emergency is over.

Goal #51

Maintain fire suppression capabilities which allow an appropriate suppression response to all wildfires.

Objectives

a. Provide fire suppression action on all wildfires which is cost effective and protects life and property.

b. Each wildfire ignition will receive an appropriate response (confinement, containment or control).

c. If the wildfire escapes initial attack the suppression decision will be based on an escaped fire situation analysis.

d. The extent of the suppression will be based on resource values, costs, burning conditions, safety, protection of private property, spread potential and fire organization commitment.

e. Wildfire suppression shall be based on the threat of life, property and a current National Fire Management Analysis.

Goal #52

Establish and maintain fuel mosaics which result in an acceptable hazard and spread potential of wildfire, allow an appropriate wildfire suppression and contribute to other resource programs and aesthetics.

Objectives

- a. Use prescribed fire when cost effective to achieve other resource vegetative manipulation objectives such as for timber, wildlife or range management.
- b. Prescribed fires using planned ignitions may be used to duplicate the recorded fire frequency, size and effect.
- c. About 2,000 acres of fuels will be treated annually.
- d. Utilization will be stressed as the primary method of fuel reduction with follow-up treatment and/or burning as needed.
- e. Vegetative modification projects should be designed to break up continuous fuel types.

PUBLIC INFORMATION

Goal #53

Resource Management - Inform the public of National Forest resource management activities as related to the national and local economy.

Objectives

- a. Emphasize resource management as a cost-effective activity.
- b. Relate the information to the management direction as established in the Forest Plan.

Goal #54

Visitor Information Support - The Humboldt National Forest will provide interpretive service programs to help resolve management conflicts and increase public understanding of National Forest management.

Objectives

- a. Provide safe and enjoyable use of recreation opportunities:
 - (1) Stress the use of volunteers to supplement the Forest information program and to improve visitor contacts.
 - (2) Provide visitor information services at all Ranger District Offices, Lehman Caves Visitor Center during the peak recreation season, and Forest Supervisor's Office.
 - (3) Provide and participate in appropriate public displays or events.
 - (4) Complete timely updates of important Forest publications including Forest recreation maps and Travel Plan maps.
 - (5) Provide a system of information and signing, adequate to meet the public's needs.

b. Continue development of the Recreation Opportunity Guide.

Goal #55

Environmental Education - Support the environmental education efforts of the local school systems.

Objectives

a. The Forest will coordinate development of environmental education sites and curriculum but the programs will be administered by the participating schools.

Goal #56

Public Involvement - Ensure appropriate public participation in National Forest planning and decision making.

Objectives

a. Maintain full contact with all government and special interest groups and the general public by:

(1) Maintaining contact with state government units.

(2) Maintaining contact with the state legislators.

(3) Maintaining contact with Congressional delegation.

(4) Maintaining contact with all identified special interest groups including industry, environment, recreation and permittees.

(5) Maintaining local contacts will be District Ranger's responsibility.

(6) Ensuring adequate public notification by mass media, personal contact and direct mail to allow the public to participate.

Goal #57

Increase and maintain service to the public.

Objectives

a. Increase public contacts in the field.

b. Emphasize the HOST Program and "Service" concept through employee training.

c. Inform the public of Forest activities and opportunities through the media.

(1) Provide weekly recreation reports, as needed, to the media.

(2) Provide current recreation information to the media.

- d. Improve appearance of facilities, vehicles and work areas.
- e. Redesign facilities and visitor information centers to accommodate elderly and handicapped persons.
- f. Provide recreational opportunities such as trails on National Forest land adjacent to private resorts.
- g. Provide access to firewood.

Goal # 58

Perpetuate and protect bristlecone pine.

C. FOREST-WIDE STANDARDS AND GUIDELINES

Management requirements necessary for achieving goals and objectives are referred to as standards and guidelines. These state the bound or constraints within which management practices will be performed. Within this document, the terms "standards" and "guidelines" are interchangeable with no difference in meaning. The Forest-wide standards and guidelines described in the following section were developed:

- (1) to resolve public issues and management concerns.
- (2) to direct management practices to accomplish Forest-wide goals and objectives.

The application of standards and guidelines is intended as follows:

-- Where conflicts occur among standards and guidelines the conflict will be resolved in favor of the direction which produces the greatest degree of multiple use values (e.g., direction which benefits three resource uses will be applied over direction which benefits two or less resource uses).

-- Forest Interdisciplinary Teams should recommend to the Forest Management Team modifications of conflicting guidelines or standards when such changes would eliminate the probability of conflict in similar situations in the future.

Riparian Area Management

Standards and guidelines for riparian areas can be found in a sub-section of the "Soil and Water" section. Additional standards and guidelines for riparian areas are located under other resource headings, such as "Range", "Wildlife", "Recreation", etc.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RECREATION			
Recreation Planning	A01	Evaluate unique vegetative types for special management designation	
ROS and VQO Management	A02	Manage for the Recreation Opportunity Spectrum (ROS) as inventoried.	
		Maintain the present amount of ROS Primitive and Semi-Primitive Non-Motorized area.	Allow no new permanent roads except for mineral production.
		Manage the visual landscape, as inventoried, with the planned Visual Quality Objectives (VQO).	
		Rehabilitate or mitigate visually unacceptable conditions or facilities.	Inventory visually unacceptable conditions.
Cultural Resource Planning, Inventory, Evaluation/ Nomination/ Protection/ Enhancement	A01 A02 A03 A04	Standards and guidelines which follow are consistent with procedures accepted by the State Historic Preservation Office (SHPO), Bureau of Land Management, and professionally accepted standards supported by the archaeological community in the area. Direction in this Plan calls for full implementation of these standards and guidelines in managing cultural resources on the Forest and in complying with applicable Federal laws and regulation including but not limited to: the National Historic Preservation Act of 1966,	In consultation with the SHPO and in coordination with other Federal and State agencies, forest-wide and area or site specific plans will be developed. Such plans will include management recommendations and alternatives for properties on or eligible for the National Register as well as for properties which do not necessarily qualify for nomination. To the extent possible, plans will guide further inventory and evaluation needs and be in concert with the State Historic Preservation Plan. A Cultural Resource Overview will be completed by 1988 and used as a guide in conjunction with the State Historic Preservation Plan for project survey and forest-wide cultural resource management.

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RECREATION (Cont.)			
Cultural Resource	A01	as amended (NPA); Executive Order 11593;	In compliance with EO 11593 and the NPA,
Planning, Inven-	A02	the implementing regulations in 36 CFR	a professionally supervised cultural
tory, Evaluation/	A03	800 and 36 CFR 60; supplementary	resource management program will be
Nomination,	A04	Advisory Council guidelines; the	conducted. Paraprofessional training
Protection/		Antiquities Act of 1906; and	will require a 40 hour course. Para-
Enhancement		the Archaeological Resources	professionals can conduct small, non-
		Protection Act of 1979. Consultation	complex surveys and projects independ-
		with the SHPO, the President's	ently with professional review and
		Advisory Council on Historic Preserva-	work directly with a CRM specialist
		tion, and the keeper of Register	on more complex projects or in areas of
		will be conducted as appropriate	high sensitivity
		in fulfilling responsibilities	
		under Section 106 of the NPA, as	A Forest-wide programmatic inventory will
		implemented by 36 CFR 800, and	be conducted. This will aid in planning,
		the regulatory mandates of 36 CFR	management decisions, and the development
		60.	of an inventory of National Register
			properties. To implement forest-wide
			inventory, base data will be prepared
			for identifying high and moderate
			sensitivity for cultural resources.
			Although low sensitivity areas will be
			will be sampled in the inventory,
			priority will be given to areas with
			the highest predictability and based
			on issues, values, risks, and input
			from the SHPO as appropriate.
			A cultural resource inventory will be
			conducted prior to decision which
			could have an effect on significant
			sites in areas where previous survey
			and evaluation have not been accom-
			plished. Resource activities impacting

Forest-Wide Management Direction, Standards, and Guidelines

MTH		MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RECREATION (Cont)	CODE		
Cultural Resource	A01		known cultural resources will allow
Planning, Inventory, Evaluation/	A02		for evaluation and, where needed,
Nomination	A03		mitigation of impacts prior to project
	A04		implementation.
			Cultural resource inventory will be conducted
			on National Forest lands proposed for
			exchange out of federal ownership.
			For inventory purposes, a mix of intensive
			systematic survey and intuitive survey
			will be conducted with actual coverage
			depending on such variables as slope,
			vegetative cover, and known or suspected
			sensitivity. For intensive, systematic
			survey, 30 meter intervals generally will
			be the maximum used although transect
			interval can be either shortened or widened
			depending upon professional judgement.
			A professionally acceptable level
			of recordation of properties and a survey
			report are required.
			Where appropriate, thematic inventory and
			evaluation will be conducted for known
			eligible or potentially eligible properties;
			e.g., structures of the CCC era. As
			appropriate, the best examples will be
			nominated to the National Register and to
			the extent possible managed for preservation-
			in-place.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RECREATION (Cont.)			
Cultural Resource	A01		All identified cultural resources will be evaluated for National Register eligibility. To achieve programmatic goals forest-wide, priority will be given to sites with known National Register potential especially where degradation or other disturbance might endanger the integrity of the property
Planning, Inventory,	A02		
Evaluation/	A03		
Nomination,	A04		
Protection/			At the project level, assessment will include effects of proposed undertakings, recommendations of feasible alternatives to protect cultural resource values, and input into EA/EIS documents.
Enhancement			Properties will be evaluated as to their potential to contribute data significant to the prehistory or history of the nation, state, or local area pursuant to 36 CFR 60 and direction in the State Historic Preservation Plan. At a minimum, the following criteria will be considered appropriate:
			1. Data relating to the Victorian settlement frontier, the mining frontier, ranching industry, industry, industrial development, transportation and communication corridors, lumber industry, and ethnic populations.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RECREATION (Cont.)			
Cultural Resource	A01		
Planning, Inventory, Evaluation,	A02		
Nomination, Protection,	A03		
Enhancement	A04		

2. Data pertaining to prehistoric occupation including cultural affiliation, chronology, adaptation, synchronic and diachronic variation, paleo-environmental reconstruction, and depositional history.

3. Data of local or regional nature as outlined in the Archeological Element of State Historic Preservation Plan.

A minimum of five properties will be nominated to the National Register over the 10 year planning period. This will be accomplished by nominating at least one property every two years.

As appropriate, avoidance, data recovery, or other mitigation practices will be implemented when significant cultural resources will be affected by project impacts. Avoidance may necessitate redesign of a project. Data recovery and mitigation plans will be in compliance with applicable laws, regulation, and supplementary Advisory Council guidelines.

Significant cultural resources will be protected from disturbance and deterioration from natural process. All cultural resources will be protected from unauthorized disturbance and collection. An emphasis will be placed on protection measures such as signing, fencing, rehabilitation, stabilization, monitoring, law enforcement, and public information.

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RECREATION (Cont)			
Cultural Resource	A01		Enhancement and interpretation of cultural resources will be coordinated with visitor information services, Forest interpretive programs, and where practical developed recreation use.
Planning, Inventory, Evaluation/	A02		Academic research will be encouraged.
Nomination, Protection/	A03		Review, processing, and administration of Special Use Permits and other Cultural Resource Permits will be handled with maximum efficiency.
Enhancement	A04		Recreation development at sites where there is a high water table will provide proper design features to protect water quality.
Facility and Site Construction and Reconstruction	A05	Bring the condition of developed recreation facilities to maintenance class 1 by the year 2000 or remove.	Priorities will be health and safety improvement of existing substandard facilities.
Facility and Site Management	A06	Manage developed sites at the standard service level during the managed recreation season.	Prepare and implement operation and maintenance plans for all developed sites.
	A07		Limit camping to 14 days.
		Protect developed recreation sites by limiting season of use, length of stay, and numbers of people using the site.	

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES RECREATION (Cont.) Facility and Site Management	MGM CODE A07	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
		Develop and implement site prescriptions to achieve and maintain desirable vegetative cover.	Regulate opening and closing dates as listed in RUM. Dates may change depending on weather conditions or as demand changes.
		Complete annual safety inspection and remove hazards to protect the safety of the public.	Complete developed site vegetative management plans.
			Conduct green hazard tree evaluation at least every ten years.
			Remove hazard trees and other hazards prior to campground openings and as needed during recreation season
			Manage trees in selected developed sites to minimize damage.
		Allow no site disturbing activities at developed sites except to improve the site.	Allow no timber harvest, mineral development or other site disturbing activities on developed sites, except for salvage work following natural disasters.
		Use pack-in pack-out system where practical.	Contact site users and post notices.
		Charge fees at locations meeting legal requirements unless collection costs exceed revenue collected.	
		Install vandal-resistant facilities at developed sites where needed and cost effective.	

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>RECREATION (Cont.)</u> Facility and Site Management (Cont.)			
	A07	Comply with State water system standards.	
Public Information	A07	Use volunteers to supplement the Forest information program and improve visitor information service. Provide visitor information services. Maintain contact with local governments, special interest groups, and the general public.	Provide displays and participate in public events.
Recreation Residence	A07	Retain existing recreation residence special use permits.	See Appendix I for specific standards and guidelines.
Recreation Special Use	A08	Administer recreation special uses to insure that permittees meet minimum environmental and public standards. Issue special-use permits to permittees fulfilling an obvious public need or demand and where this use will not interfere with other public uses.	
Outfitter and Guide		Cooperate with NDOW in the issuance of outfitter and guide permits.	Direct the current outfitter-guide operation away from areas heavily used by other users. Inspect areas used by outfitter-guides to insure that impacts are acceptable particularly from horses. Where there are unacceptable impacts, eliminate or reduce use.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES RECREATION (Cont) Winter Use	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
	A08	Encourage the State and County to snowplow parking areas at sites needed for cross-country skiing, snowmobiling and snow play.	Mark snowmobile trails. Cooperate with Nevada State Parks to provide snowmobile facilities.
Dispersed Use Administration		Evaluate proposals for helicopter skiing on a case-by-case basis.	
		Manage dispersed recreation to protect resources and to prevent over-use.	Provide traffic control and toilets at desired sites when needed. Utilize special-use permits to direct and control use. Use rest rotation to help sites recover vegetation.
			Close undeveloped campsites to vehicles where resources are being damaged.
		Rehabilitate dispersed sites that show unacceptable deterioration due to overuse.	Limit dispersed camping to a 16-day length of stay.
		Direct large camping groups to dispersed sites outside of developed sites.	Close and/or revegetate the site.
		Allow no dispersed area camping adjacent to developed sites.	
Off-road Vehicle Management		Maintain the travel plan to minimize user conflicts, reduce resource damage and maintain public safety.	Replace gates with cattleguards where livestock management problems have resulted from gates left open.
			Monitor the effectiveness of the Travel Plan and review the need for changes annually.
			Maintain signs to Level 4.

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>RECREATION (Cont.)</u> Off-road Vehicle Management (Cont.)			
Trail Construction	A10 A11	Construct or reconstruct trails and trailhead facilities shown in the Forest Action Schedule	Refer to the manual on Uniform Traffic Control devices when closing roads and trails. Construct trails with minimal disturbance of soil and vegetation. Priorities for use of trail construction funds: 1. Reconstruct trail to provide for public safety, avoid wet areas, prevent erosion, and resolve grade problems. 2. Improve trails to accommodate motorcycles and/or horse use. 3. Construct new trails. Stabilize and obliterate abandoned trails. Design new or relocated trails to take advantage of opportunities for interpreting nature features and viewing wildlife. Relocate poorly aligned trails and rehabilitate abandoned portions. Design bridges for expected use. Maintain signs to Level 4.
Trail System Maintenance and	A12	Provide a trail system adequate for administrators, permittees, and the public.	
		Require resource activities impacting trails to mitigate impacts.	
	A12	Encourage Local and State agencies and civic organizations to help maintain trails.	Cooperate with Local and State agencies as well as, civic organizations and clubs to maintain trails.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES WILDLIFE & FISH Surveys, Planning Prescriptions, Monitoring Cooperation and Administration	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
	C01	Maintain productivity of wildlife habitat through direct habitat improvement and coordination with other land use programs.	Provide terrestrial and aquatic habitat analysis input for fuelwood removal, road construction projects, range allotment planning and development, water rights adjudication, hydropower development, and mineral exploration and development taking place on the National Forest.
			Design range improvements (structural and nonstructural) to meet and accommodate wildlife/fish needs.
			Design road and trail crossings of streams populated with fish to allow for fish passage and maintenance of water quality standards.
			Require new special uses to be designed to limit the loss of any wildlife habitat to the least amount possible.
Cooperate with NDOW in managing wildlife habitat.			Involve the Nevada Department of Wildlife in programs and activities that affect wildlife and fish habitats and perform joint monitoring of these habitats.
			Review the MOU with NDOW annually and update as needed.
			Allow NDOW to treat lakes and streams with chemicals to kill undesirable or overabundant fish populations. Restock treated lakes and streams with desirable species.
			Participate annually in game range observations and studies and make harvest recommendations.

MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
PRACTICES WILDLIFE (Cont.) Surveys, Planning Prescriptions, Monitoring Cooperation and Administration	Provide habitat for sensitive and Federally listed T&E species.	Transplants of new species will be considered appropriate where a vacant niche has been identified and conflicts with other resources are minimal or can be mitigated. First priority is to coordinate other resource activities with Lahontan and Bonneville cutthroat trout habitat management. Accomplish structural improvement work in suitable areas to improve habitat for Lahontan and Bonneville cutthroat trout. Strive to achieve and maintain at least 90% of the natural bank stability for streams supporting Lahontan or Bonneville cutthroat trout. Cooperate with NDOI and U.S. Fish and Wildlife Service in recovery of the peregrine falcon. Protect complexes comprised of moist habitats and adjacent security areas. Place water developments in meadows or seasonal wet spots only after interdisciplinary review. Restrict oil and gas exploration and development activities in key big game habitats.
	Protect and improve key or important habitats.	

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
WILDLIFE (Cont.)			
Surveys, Planning	C01		Protect key sage grouse breeding complexes; i.e., strutting grounds and associated nesting areas.
Prescriptions,			
Monitoring			Manage snowmobile use to minimize conflicts with wintering big game animals.
Cooperation and			
Administration			
(Cont.)			
Habitat Improvement	C02	Improve or maintain the quality and	Complete habitat improvements as listed in
(Structural and	C03	quantity of terrestrial and riparian	the Forest Action Plan.
Nonstructural)		habitats.	Water developments constructed for live-stock will provide access and escape for wildlife.
			Build all fences to provide ease of wildlife passage.
			Vegetation manipulation projects will be designed to consider the needs of wildlife.
			Sagebrush control will not be conducted on any known or identified key sage grouse range except to maintain or improve grouse habitat.
			Fuelwood harvest policy will reflect the needs of wildlife.
			Vegetation manipulation projects will be permitted within key deer winter range to the extent they maintain or enhance the area for deer.

Forest-Wide Management Direction, Standards, and Guidelines

MTH	CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
WILDLIFE (Cont.) Habitat Improvement and Nonstructural (Cont.)	002		Vegetation manipulation projects will be designed to create desirable edge effects and leave islands of untreated vegetation where needed for thermal and escape cover.
	003		A 100 foot strip of living sagebrush or a distance determined by an interdisciplinary team will be retained around original meadow boundaries and around patches of aspen when conducting vegetative manipulation projects.
	003	Improve habitat quality and quantity for Lahontan and Bonneville cutthroat trout.	Accomplish structural improvement work in suitable areas to improve habitat for Lahontan and Bonneville cutthroat trout. Other standards and guidelines applicable to Lahontan cutthroat trout can be found under the range, soil and water sections.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>RANGE</u> Range Resource Planning	D01	Manage allotments to maintain suitable range in satisfactory ecological condition and improve range in less than satisfactory ecological condition by developing management plans on all allotments and wild horse territories by 1988.	Develop allotment management and territory plans for each allotment and wild horse territory. Update allotment management and territory plans to reflect Forest standards and guidelines. Forage utilization standards are established for each grazing allotment as a part of the allotment management plan. As plans are updated the standards of utilization may be adjusted. These utilization standards are developed by an interdisciplinary team to insure that specific resource objectives are met. Implement grazing systems which provide for deferment or rest where feasible. Rest-rotation systems will be used when feasible and where significant area is in unsatisfactory ecological condition. Each new or updated allotment management or wild horse territory plan will contain specific monitoring standards developed with an interdisciplinary team. Locate where feasible, all range improvements away from travel corridors, especially trails and popular fisheries and other water courses. Incorporate design and landscape management principles to mitigate the visual impacts. Grazing systems will be developed to enhance riparian zones.

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RANGE (Cont.) Range Resource Planning	D01		

Where possible, relocate stock driveways and trailing areas away from riparian zones.

Conversion from sheep grazing to cattle grazing will not be allowed where riparian areas would be adversely affected.

Develop an annual operating plan for each allotment which identifies the specific action items and techniques to be utilized during the current grazing season. The annual operating plan will consist of written and graphic sections. The written section will include, where applicable:

1. Clear and definite instructions concerning management of livestock while on the allotment. This should include the schedule for each unit to be grazed, expected amount of time each unit will be grazed, how the livestock will be moved from unit, and standards for getting the livestock moved and "cleaned out" of a grazing unit.
2. Range improvement maintenance responsibility for the current year, when the maintenance will be accomplished, and the maintenance standards to be attained.
3. A list of range improvement projects to be started or completed during the year.
4. Any necessary instructions concerning trailing and/or trucking livestock to and from the allotment.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RANGE (Cont.) Range Resource Planning	D01		5. Special instructions on camp sanitation and fire prevention responsibilities of permittee. 6. Multiple use coordination requirements with which the permittee is expected to comply, including animal control practices and compliance with endangered and threatened species requirements.

The graphic section should include:

1. A map showing allotment and management unit boundaries, range improvement, closed areas and special management situations.
2. Acceptable forms for recording actual use, losses, improvements, maintenance, and other management data.

Allotment development should be based on an approved allotment management plan including an economic analysis

Allotment management plans will identify and schedule detailed forage improvement opportunities and structural/nonstructural improvement needs.

Develop coordinated resource management plans with other user groups.

Integrate range management on National Forest allotments with contiguous BLM, State and/or private lands, where possible.

Coordinate allotment management planning with interested agencies and individuals.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RANGE (Cont.) Range Resource Planning (Cont.)	D01	Protect threatened, endangered, and sensitive plant species.	Identify mitigating measures in the allotment management plan which will protect sensitive plant species and incorporate these mitigating measures into the annual plan of use. Livestock management will consider sensitive areas such as riparian areas and critical wildlife habitats to maintain or enhance special values. Coordinate livestock grazing with the wildlife habitat improvement program. Management will be directed toward having riparian areas in good or better ecological condition and stable or upward trend. Complete livestock adjustments needed to develop an acceptable balance between available capacity and livestock numbers. Water developments constructed for livestock will provide access and escape ramps for wildlife. Build all fences to allow for wildlife passage. Minimize livestock/big game conflicts on key winter ranges:
		Reduce conflicts between livestock and wildlife.	
			1. Hold stocking levels of livestock on key winter ranges to the carrying capacity needed to meet objectives.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MIH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RANGE (Cont.)			
Range Resource Planning (Cont.)	D01		2. Implement grazing systems that reduce competition for forage on winter ranges. 3. Apply vegetative treatment on winter range which will improve habitat conditions. 4. Install structural improvements on winter range which will aid in controlling and distributing livestock use. Minimize livestock/fisheries habitat conflicts in riparian areas: 1. Implement grazing systems that enhance riparian area streambank stability and vegetative cover. 2. Apply vegetative treatment which will improve habitat conditions. 3. Install structural improvements (range and fisheries) to aid recovery of riparian area resources. Coordinate the range development program with recreation use in campgrounds in the development of the Allotment Management Plan. Provide gates or fence passage on trails as needed to facilitate access. Fence campgrounds when conflicts with other resources cannot be otherwise resolved. Analysis or updates will be conducted according to Regional Guidelines.
		Reduce recreation/livestock conflicts.	
Range Resource Inventory	D02	Update range allotment analysis as needed.	

PRACTICES RANGE (Cont.)	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
Range Resource Inventory (Cont.)	D02	Describe ecological sites and develop score cards to range ecological status and resource value. Define management strategies for rangeland. Conduct monitoring and evaluation on all allotments in accordance with Forest Service Regional Handbook. The Nevada Rangeland Monitoring Handbook will be used as a guideline.	Utilize updated inventories of noxious weeds in planning for and conducting of treatment programs. Provide updated inventories to state weed control specialists.
Noxious Weeds Inventory	D02	Cooperate with counties and others in and inventorying identifying priority noxious weeds infestations.	Implement non-structural range improvement program identified within the allotment management plan. NDM will be notified at least one year in advance of implementation of all non-structural projects.
Range Resource Improvement (Non-Structural)	D03	Continue the non-structural range development program to maintain or improve resource conditions.	Coordinate non-structural improvements with wildlife habitat requirements. Complete non-structural improvement projects to treat deteriorated range, treat range to sustain existing use, and to improve range condition.
Noxious Weed Control	D03	Livestock grazing will not be allowed for two years following prescribed fires, plantings, and seedings. Cooperate with counties and others in controlling noxious weeds and poisonous plants.	Utilize fire as a tool to improve or maintain ecological conditions. Rehabilitate wildfire areas to maintain or improve ecological conditions. Continue memorandums of understanding with counties.



Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RANGE (Cont.)			
Noxious Weed Control (Cont.)	D03	Utilize direction provided by the Intermountain Region programmatic noxious weed and poisonous plant control Environmental Impact Statement.	Incorporate noxious weed control into mineral operating plans and allotment management plans. Treat new infestation and priority one noxious weeds first. Coordinate with permittees to treat poisonous plants where livestock losses have occurred and/or have the potential to occur. Maintain non-structural range improvements identified in the IMP.
Maintenance of Non-Structural Range Resource Improvements	D04	Maintain non-structural range improvements to maintain or improve resource conditions.	Construct range improvements specified in approved management plans. Cooperatively construct or remove improvements with users or other agencies. File for water rights on all water sources that are developed for livestock and/or wildlife purposes. Priority will be given to range improvements on allotments with high percentage of lands in unsatisfactory ecological condition. Locate improvements to minimize adverse impacts on wildlife. Fence spring sources developed for livestock use to maintain water quality. Fencing as a management tool to totally exclude livestock will be utilized only when no other alternatives are practical.
Range Resources Improvement (Structural)	D05	Range structural improvements will be constructed and maintained to facilitate proper use of the range resource.	

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>RANGE (Cont.)</u>			
Range Resource Improvement (Cont.)	D05		Assure water availability for wildlife at springs which are developed for livestock use.
Range Administration and Management	D07	Administer the range resource within the direction in the allotment management plan and annual operating plan.	Unfenced private lands within an allotment can be grazed in conjunction with NFS lands. Assigned improvements will be maintained by the permittee in accordance with the provisions of the term grazing permit. Evaluate livestock conversion requests based on resource needs capabilities and not solely on the desires of the livestock permittee. Vacant allotments and allotments in a nonuse status that are in satisfactory ecological condition will be considered for livestock use. Improve off-stream distribution of livestock to reduce pressure on riparian zones where needed. Range readiness, livestock numbers and ownership and compliance with annual plan of use will be monitored. Allow predator control on grazing allotments where there is a demonstrated need as shown by permittee reports or as verified onsite by Forest Service or APHIS personnel. Allow the use of only environmentally acceptable methods of predator control.
Predator and Insect Control		Assure compliance with the grazing permit.	
		Support predator and insect control conducted by the APHIS and State agencies.	

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MIH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RANGE (Cont.)			
Range Administration and Management (Cont.)	D07		Treatment of rangeland pests by APHIS will be requested when serious forage loss is expected.
Wild Horse Management		Manage wild horses in accordance with territory plans.	Carry out Interagency agreements between the Humboldt National Forest and the Bureau of Land Management. Involve wild free-roaming horse and burro interest groups as well as other Federal and State agencies in the management of wild free-roaming horses and burros. Manage wild free-roaming horses and burros to population levels compatible with the resource capabilities and needs.

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
TIMBER			
Inventory	E00	Inventory existing woodlands to determine fuelwood, post, poles, and Christmas tree supplies.	
Reforestation	E04	Encourage the enhancement of the forest timber resources for wood products, wildlife habitat, and aesthetics.	Consider the establishment of timber species on suitable sites.
Timber Stand Improvement	E05 E06	Improve Christmas tree stock.	Where appropriate, thin trees and remove competing vegetation to improve form and rate of growth of potential Christmas tree stock.
		Utilize K-V funds to improve sale area.	Sale plans will be prepared which will outline resource objectives for expenditure of K-V funds.
Timber Harvest Administration	E07	Comply with state law.	All wood product purchasers shall comply with state laws governing the removal and transportation of the product.
		No road or trail construction by wood product users will be allowed without a permit.	
		Develop a personal use firewood program.	Inventory areas for potential wood products utilization if roads were constructed to permit access.
		Provide for commercial firewood sales.	Standard permit restrictions are: 1. No cutting within or adjacent to developed recreation or concentrated public use areas. 2. Maximum stump height of 6". 3. Slash must be lopped and scattered. 4. Shovel and fire extinguisher are required during "Extreme" fire danger. 5. Chain saws must be equipped with approved spark arrestors.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
TIMBER (Cont.) Timber Harvest Administration (Cont.)	E07	Post and pole sales are allowed only in areas where sufficient wood is available.	6. Only dead, down trees will be cut unless otherwise designated by a Forest Officer. Encourage commercial firewood sales in more remote areas. Provide for access where needed to harvest dead and green firewood. Leave at least 3 snags/acre within 500 feet of streams. Protect nesting trees of threatened, endangered, or sensitive species. Evaluate stand conditions (volume and quality) and transportation needs prior to sale layout. Coordinate with nearby private landowners and other interests to insure private land boundaries are respected. Allow no harvesting on slopes over 40% unless specified within the timber sale plan.

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
TIMBER Timber Harvest Administration (Cont.)	E07		Sale planning will consider: 1. Future recreation plans. 2. Existing recreation use. 3. Visual quality objectives. 4. Impact on livestock and range improvements. No green pinyon pine with diameter less than 6 inches will be cut in a designated green fuelwood cutting area unless covered by permit or tag. Limber pine removal will only be allowed in specific cases (such as its removal as hazard trees) and where it is specifically covered by special permit issued by the District Ranger. No cutting of green or standing dead cottonwood unless it has been designated as a hazard tree for removal or is not required to meet wildlife objectives. Proposed type conversions in pinyon-juniper should be open to the public for greenwood harvest at least one year prior to project treatment. Discourage off-road vehicle traffic by fuelwood cutters and wood product users.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
TIMBER (Cont.) Timber Harvest Administration (Cont.)	E07	Harvest green firewood in a manner that results in natural regeneration. Of the stand where type conversion is not desired.	Along major transportation corridors and other sensitive areas fuelwood cutting/gathering will be designated to maintain visual quality. Fuelwood, personal use and commercial, will be removed from National Forest lands under permit only. No road or trail construction by wood product users will be allowed without a permit. All wood product purchasers shall comply with state laws governing the removal and transportation. Maintenance and improvement of wildlife habitat will be incorporated into fuelwood harvesting programs. Manage green pinyon sales to allow the retention of at least 5 pine cone producing trees per acre for cone production and natural reseedling. Mature aspen stands will be managed to increase regeneration. Coordinate regeneration projects with other agencies and users. Discourage off-road vehicle traffic by Christmas tree cutters. Inventory existing woodlands to determine Christmas tree supplies. Along major transportation corridors and other sensitive areas, Christmas tree cutting areas will be designated to maintain visual quality.
		Provide for personal use Christmas tree sales.	
		Provide for commercial Christmas tree sales.	

MTH	CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
PRACTICES	E07	Prepare and offer commercial pinenut sales as crop allows.	No topping of trees will be permitted.
TIMBER (Cont.)			Christmas trees will be removed from National Forest lands under permit only.
Timber Harvest			The public may gather pinenuts within designated commercial pinenut sale areas.
Administration			Pinyon pine trees will not be cut down and damage to trees will be kept to a minimum while securing cones.
(Cont.)		Maintain traditional pinenut gathering areas.	Commercial pinenut harvesters shall not place camps within 100 feet of any live streams or within 200 feet of any spring.
			Commercial pinenut harvesters will scatter cones.
			No commercial pinenut harvesting will be allowed in campgrounds.
			Pinyon cones will be disposed of either by burning or scattering over a wide area away from the view of Forest visitors using system roads.
			No commercial pinenut harvesting camps will be allowed in or near campgrounds or in areas heavily used by other Forest visitors.
			Require commercial pinenut gathering camps to utilize pit toilets.
			Have commercial pickers clean up the area of their use before they leave the site. All commercial sales will carry a bond sufficient to cover the costs of such cleanup.
			Commercial pinenut products will be removed from National Forest lands under permit only.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>SOIL AND WATER</u> Inventory	F01	Complete order three soil surveys by 1995 in cooperation with the national soil survey program. Cooperate with agencies conducting hydrologic surveys. Soil and water inventories will be conducted to meet specific management information needs.	Use watershed condition inventory to identify problem areas and to set priorities for project planning for soil and water improvement projects. Maintain and update the watershed improvement needs inventory annually.
Planning	F02	Identify and adopt soil and water conservation measures applicable to the Forest and monitor effects on soil erosion and water quality in accordance with FL. 92-500.	Order two soil surveys will be conducted prior to all type conversion projects. Allow resource development activities that can be mitigated to meet Federal, State, and local water quality standards. Areas may be closed to firewood cutting dispersed recreation, grazing or vehicle use if such activities pose a threat to water quality or other resources. Mineral exploration and development will be managed to maintain watershed objectives where possible.
		Soils will be managed to maintain productivity and quality.	Where soil has been severely disturbed by management activities and the establishment of vegetation is needed to prevent erosion, the soil will be prepared, fertilized and seeded following recommendations of an interdisciplinary team.
			Where possible avoid soil disturbing activities where rehabilitation measures cannot restore or stabilize the site following disturbance.

MTH	CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
PRACTICES SOIL AND WATER Improvement	(Cont.)	F03 Give priority for improvement to watersheds where accelerated erosion exists or is increasing.	Install erosion control structures and seed as needed to reduce gully erosion and improve ground cover.
	F03		Prevent road washouts and channel bank cutting by removing debris block from streams.
Fire Rehabil- itation	F03	An interdisciplinary analysis will be made for all fires larger than 300 acres (starting before the fire is controlled) to develop a rehabilitation plan or to determine that a plan is not necessary.	An interdisciplinary team will specifically address (a) fire suppression rehabilitation, (c) resource adjustments, and (d) long-term resource restoration.
		Smaller fires may also require an interdisciplinary analysis if on and off site values justify such an analysis.	Site-specific resource objectives will be identified as part of the analysis and rehabilitation plan. (Reference Appendix J) Every effort should be made to reseed areas which are prone to cheatgrass invasion as soon as possible after the burn.
			Fire suppression rehabilitation is that work necessary to restore the site due to fire suppression activities such as tractor lines. The work will be completed as soon as possible and by the suppression crews on the fire. All tractor lines will be waterbarred and seeded immediately. Erosion control work and seeding will be completed on all other disturbed areas.
			Emergency rehabilitation will be completed when it is necessary to prevent loss of soil and onsite productivity, loss of water control and deterioration of water quality, and when there is threat to life or property.
			Resource adjustments are those management constraints which are necessary to provide for rehabilitation. A burned area should not be grazed by livestock for two growing seasons following the burn.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
SOIL AND WATER (Cont.) Administration/ Management	F04	Close travel routes and areas to vehicle travel if there is resource damage.	Install gates or other road closure devices to limit traffic and control unacceptable resource damage.
		Manage soils to maintain long term productivity.	Adopt soil and water conservation practices in the development of projects.
		Establish and maintain an active liaison with other agencies concerned with soil and water management.	Protect snow survey sites.
		Comply with state water quality standards.	Monitor compliance with state water quality standards.
Air Quality		Meet requirements of the State Air Quality Implementation Plan.	
		Manage the airshed over the Forest to meet class II air quality standards.	
Riparian Area Management	F01 F02 F03 F04	Protect or improve riparian dependant resources.	Protect wet areas around springs for wildlife habitat, livestock grazing, and recreation opportunities.
			Degraded riparian areas as identified in Water Resource Inventory will be given high priority in the range improvement and watershed restoration programs. In addition, the causes of degradation will be eliminated.
			Protect and encourage the reestablishment of riparian vegetation.
			Allow for the control of beavers in areas where their food supply is limited and where unacceptable damage to the riparian areas will occur.

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
SOIL AND WATER (Cont.)			
Riparian Area	F01		Do not allow construction of new roads except for crossings within the riparian area unless no other alternatives are available. Reconstruction should consider alternate locations.
Management	F02		Avoid development of 100 - year floodplain unless it is the only practicable alternative.
	F03		The land manager, utilizing interdisciplinary team inputs, will assure that any necessary stream alteration is carried out in accordance with prescribed specifications.
	F04		Management activities or AP's affecting the riparian area will be coordinated with appropriate Federal, state and local agencies.
			Hand application of herbicides to control noxious weeds will be allowed provided that herbicides are not allowed to enter water.
			Management activities in riparian areas will be monitored and corrective action will be taken to prevent deterioration of riparian areas or degradation of water quality.
			When developing or revising AP's establish proper use criteria that will protect or enhance riparian areas.
			Maintain or improve the Biotic Condition Index (BCI) on 95% of the streams to a minimum standard of 85 BCI.
			Strive to achieve and maintain at least 90% of the natural bank stability for streams supporting Labretan or Bonneville cutthroat trout and 80% on all other streams.

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PRACTICES	MHI	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
SOIL AND WATER (Cont.) Riparian Area Management (Cont.)			Require a mineral evaluation by a qualified geologist, mining engineer or mineral specialist prior to approving operating plans in key riparian areas.
Right/Use Management	F07	Participate in all water rights adjudications involving National Forest administered lands. Apply for water rights to meet Forest management needs in compliance with State water law.	Whenever water rights are authorized by Federal or State law, these will be quantified, documented, and recorded. Applicable fees will be paid by the benefitting function.
		Congress has directed the Forest Service to administer National Forest System land for multiple use purposes. These purposes have been stated in the Organic Administration Act, Multiple-Use Sustained-Yield Act, Wilderness Act, Wild and Scenic Rivers Act, and other legislation and Executive Orders. The water needed to successfully accomplish the program mandated by these acts and Executive Orders will be protected. Protests will be filed for applications of water rights where the exercise of such rights would adversely affect National Forest resources or water rights of the United States.	Water needed for National Forest System management but not available under State law and not meeting the Supreme Court criteria for a reserved right under the Organic Administration Act, will be secured by citing the applicable Federal law and conditioning occupancy permits. A Federal reserved water right will be asserted for water needed for programs of watershed management including fire protection. A reserved right will also be used to acquire water needed in the form of instream flow sufficient to maintain stability of the stream channel for the purposes of securing favorable conditions of water flow. Identify minimum flows on all perennial streams and springs for maintenance of stable stream channels and fisheries habitat.
Resource Improvement Maintenance	F08	Maintain structural and non-structural watershed improvements.	

PRACTICES	MIH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>SOIL & WATER</u> Resource Improvement Maintenance (Cont.)	F09	Establish a monitoring schedule for soil and water when the need arises, due to impacts from other resource activities.	
<u>MINERALS</u> General Technical Inventory and Evaluation	G01	Initiate action for withdrawal from entry when other applicable laws and regulations will not provide the capability for protection of the surface resource and uses.	Withdrawals from entry under the general mining laws will be in conformance with Section 204 of the Federal Land Policy and Management Act of 1976 (P.L. 94-579). Withdrawals under the Minerals Leasing Act will be in exceptional situations because of the discretion allowed in each case for disposal. Common variety mineral withdrawals are unnecessary since full authority for disposal is held by the Forest Service. Withdraw Research Natural Areas (RNAs) from mineral entry following their designation as RNAs.
Site-Specific Technical Investigations	G02	Perform mineral evaluations on mining claims or leases where development activity may cause significant surface disturbance.	Request validity examinations under the following conditions to determine if claims are being validly held and occupied: 1. Land upon which claim is located was withdrawn from mineral entry after claim location. 2. Claim occupies land needed for administrative or public purposes. (This would occur only in extreme circumstances and after consultation and negotiation with the claimant.)

Forest-Wide Management Direction, Standards, and Guidelines

MTH	CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
PRACTICES			
MINERALS (Cont.)			
Site Specific	002		3. Claim assessment work is causing unacceptable surface disturbances with little prospect of valid discovery. (This would occur only in extreme circumstances and after consultation and negotiation with the claimant.).
Technical			
Investigations			
(Cont.)			
Assessing	003	Integrate the exploration and development of mineral, common variety,	Administer areas with producing sites and known reserves with consideration of ongoing and potential mineral activities.
Exploration	004	and energy resources with the use	Avoid or minimize significant public or private investments in and near areas where mineral activities can be expected in the foreseeable future. This includes consideration for reserved and outstanding rights.
Proposals,	005	and protection of other resource	Evaluate locatable mineral operations on a case-by-case basis and document decisions through the environmental analysis process.
Lease Applications,	006	values.	
and			
Site-Specific			
Development			
			An environmental assessment will be developed by the Forest Service for each application for permit to drill (APD). The Forest Service will develop, within the frame work of the stipulations attached to the lease, those requirements and constraints necessary to protect the surface resource. The requirements and constraints developed will be made supplemental stipulations to the conditions of approval for notice to drill.
			Coordinate mineral road development with the Forest Transportation Plan for arterial and collector roads. Where possible, use existing or planned local roads.

MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
PRACTICES MINERALS (Cont.) Processing Exploration Proposals, Lease Applica- tions, and Site-Specific Development (Cont.)	003	Install gates or other road closure devices to limit traffic for public safety and control unacceptable resource damage. Provide erosion control to roads and other areas of surface disturbance at the close of each field season or when operations are temporarily suspended. Common variety minerals permits will not be issued in the following areas except where conditionally provided: 1. Lands withdrawn from mineral entry or under study from withdrawal such as developed recreation sites. 2. Do not develop borrow pits and materials sources within riparian areas except or reservoir construction where excavated area will be inundated. 3. Within 1/4 mile of or in view of high use recreation areas such as campgrounds (developed or undeveloped) travel routes (including trails) and bodies of water. Where screened from view by natural topographic features, mineral sources may be developed closer than 1/4 mile on a sitespecific basis. 4. Moderate to high mass instability areas. 5. Special use sites. 6. On a valid mining claim without owner's consent.
	004	
	005	
	006	

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MINI CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
MINERALS (Cont.)			
Processing	003		Reclaim exploration and mining areas at completion of operations by recontouring when possible, erosion control, and reseedling.
Exploration	004		
Proposals, Lease Applications, and Site-Specific Development	005		Reclamation plans will be prepared to mitigate the specific resource impacts generated by the operation.
(Cont.)	006		Bonding for reclamation will be computed based on costs the Forest Service would have to pay to accomplish the objectives of the reclamation plan.
			Reclamation standards and bonding must be reasonable and practicable according to 36 CFR 228 regulations, Regional and National Forest Service policy.
			Validity examinations will be conducted for operations proposed in National Recreation Trails, and Special Interest Areas such as Scenic and Geologic, National Historic Sites or some other special classification areas. Provide reasonable protection for these classified lands when operations are approved (following validity examination) to provide for the purposes for which the lands were classified and reasonable reclamation of disturbed lands to a condition suitable for those purposes.
			Withdraw proposed Research Natural Areas (RNA) from mineral entry following their designation as RNAs.

PRACTICES MINERALS (Cont.)	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
Processing of Applications	003 005	Obtain notice of intent and, if appropriate, a plan of operation for all proposed mining activities prior to any site disturbing activities.	Non-energy minerals activities will be limited areas whenever practical and/or within legal limits on areas where: 1. Terrain does not provide for adequate waste dumps and tailings disposal. 2. Surface based access, product transportation, and ancillary facilities necessary to operations are on slopes steeper than 60 percent, with high erosion hazard or with high geologic hazard. 3. National scenic trails and existing or proposed wilderness areas occur. Oil, gas, and geothermal activities will be limited on areas where: 1. Slopes are steeper than 40 percent. 2. Erosion hazard rating is high. 3. Geologic hazard rating is high. 4. Wilderness character will be impaired in wilderness or recommended wilderness. Forest Service authorization of geophysical prospecting will include terms and conditions controlling operating methods and times to prevent or control adverse impacts on surface resources and uses. Administer active mining claims under current laws and regulations.

Forest-Wide Management Direction, Standards, and Guidelines

MH	CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
PRACTICES			
<u>MINERALS (Cont.)</u>			
Processing of Applications	G03		Respond to proposed operating plans within 30 days of receipt.
	G05		
Processing of Lease Applications	G04	Evaluate oil and gas lease applications.	Respond to oil and gas lease applications within 30 days.
		Allow mineral leasing in areas which are not withdrawn from this activity.	Evaluate oil and gas lease development proposals with an interdisciplinary review. Appropriate mitigation measures will be recommended to the Bureau of Land Management (BLM).
			Recommendations or consent to BLM for issuance of leases and permits will include all current standard stipulations and the Regionally approved special stipulations that may be necessary for additional protection of specific surface resources and uses. These standard and current Regionally approved special stipulations are in Appendix H.
			Recommend against or deny consent or concurrence to BLM for issuance of leases, permits or licenses where operational damages on surface resources, including the impacts of surface-based access, product transportation and ancillary facilities would be irretrievable and irreversible, with low potential for reclamation.
			"No surface occupancy" clauses will be required for mineral leases within Research Natural Areas.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MIH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>MINERALS (Cont.)</u>			
Processing of			
Lease Applications (Cont.)	604		Leasable minerals activities will be limited in areas where:
			1. Terrain does not provide for adequate waste dumps and tailing disposal leaves them unstable or unreclaimable.
			2. Surface-based access, product transportation, and ancillary facilities necessary to operations are on slopes steeper than 60 percent, with high erosion hazard or with high geologic hazard.
			To protect riparian areas, new oil and gas exploration and development will adhere to standard stipulations for lands under the jurisdiction of the Department of Agriculture and Forest Service.
Administration of Operations	606	Administer active mining claims under current laws and regulations.	Inspect active mining claims at least once during the operating season.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES RURAL COMMUNITY AND HUMAN RESOURCES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
Senior Community Service Employment Program	H02 H04 H06 H07	Provide work opportunities for the Human Resource Programs.	
<u>LANDS</u> Special Use Management	J01	Administer existing permits to protect, health, safety and prevent resource damage. Combine or eliminate permits as opportunities become available.	Respond to applications for amendments and transfers for existing permits within 6 months. Give priority to permits needed to protect public health, safety, and provide community service or access to private lands. Grant new permits only when: 1. Use is appropriate for National Forest land. 2. National Forest resources and programs will not be damaged or impaired. 3. Private land is not available to accommodate the use. 4. National Forest land is the most logical place for the use. Process new special use requests and make decisions within one year. Inspect all permits as needed. Applicants who do not wish to wait for appropriated funds may reimburse the Forest Service for costs incurred in evaluating applications and administering construction of major projects.
		Issue new permits where there is a public need which cannot be adequately met off the National Forest.	

MTH	CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
PRACTICES LANDS (Cont.) Special Use (Cont.) J01			Review new applications with an interdisciplinary field analysis.
			Require a permit or other written authorization before allowing snowplowing or commercial hauling on Forest development roads during the winter except for county road department use covered by agreement.
Dams and Diversions		The proponent must demonstrate through an environmental analysis that the best location is the National Forest.	Analysis standards are: 1. Favorable benefit/cost ratio. 2. Mitigation of lost resources. 3. Minimum flow to protect downstream fisheries. 4. Minimum instream flows must also provide for favorable conditions of water flow, i.e., channel stability. 5. Conservation pool for fisheries. 6. Require permittee to construct or finance recreation facilities necessary for users of the new impoundment.
Utility Corridors		Minimize potential adverse impacts associated with utility corridors.	All existing utilities will remain in their present corridors. Place all new utility facilities within designated corridors when practical.
Federal Energy Regulatory Commission Licenses and Permits	J03	Allow improvement and maintenance of hydroelectric facilities but require protection of natural resource values and uses.	Meet Forest Service dam inspection standards. Obtain emergency preparedness and operating plan for all dams. Notify permittees of deficiencies identified in the annual inspection and request correction. Insure that streamflows below diversions are adequate to maintain fish, wildlife, a stable channel, and flushing flows.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES LANDS (Cont.)	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
Withdrawals	J04	Review withdrawals and continue or eliminate withdrawals depending upon need.	Evaluate existing withdrawals in accordance with FLPMA and HLM regulations by 1987. Recommend revocation of withdrawals no longer needed to protect National Forest surfaces by 1987. Sites where existing facilities occur or where mineral potential is high will be evaluated for withdrawal from mineral appropriation. Survey those areas of highest probability for trespass. Place unauthorized uses under permit only when it can be demonstrated that the public interest is not compromised, use is appropriate for National Forest land, and trespass was unintentional. Evaluate and take appropriate action on trespass within one year. When fences are constructed or reconstructed between private land and National Forest system lands the fences will be located on the boundary line. Use Small Tract Acts authority to resolve trespass when appropriate.
Property Boundaries	J06 J07	Locate and mark National Forest ownership lines.	
	J10	Resolve unauthorized occupancy/trespass.	

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
LANDS (Cont.)			
Land Exchange	J13	Achieve the land ownership pattern best suited to managing the resources of the Humboldt National Forest.	Accomplish exchanges identified in Forest Land Adjustment Plan.
Acquisition or	J14		
Transfer	J15		
	J16		
			Acquisition Criteria (not in order of priority:)
			1. Land needed to protect wetlands and floodplains. 2. Land needed to protect endangered and threatened wildlife species habitats. 3. Lands needed to protect key big game habitat. 4. Lands needed to protect cultural resources or provide developed recreational facilities within the Forest. 5. Lands which provide essential public access to the National Forest. 6. Lands needed to protect municipal watersheds. 7. Land exchanges which reduce administrative costs. 8. Land exchanges which improve management.
			Disposal Criteria (not in order of priority):
			1. Isolated parcels not accessible for public use. 2. Parcels better suited for private management. 3. Parcels not needed to block up National Forest ownership. 4. Lands needed by Local and State government. 5. Lands which will not result in a significant increase in hazards or cause damage to downstream values.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>LANDS (Cont.)</u>			
Land Exchange	J13		
Acquisition or	J14		
Transfer (Cont.)	J15		6. Lands that will not decrease key big game winter range capacity on a Forest-wide basis.
	J16		
ROW Acquisition	J18	Acquire road and trail rights-of-way in accordance with the Forest Action Schedule and as additional opportunities arise.	Respond to land exchange offers within 3 months. The proponent will be notified whether the proposal appears to be in the best interest of the United States, and if so, when action will begin on the proposal.
Research Natural Areas		Protect Research Natural Areas (RNAs) from disturbance while they are being considered for designation and following designation.	Limited easements may be acquired for National Forest System roads where public vehicle use is not desirable. Priority will be given to acquiring rights-of-way under full jurisdiction of the United States.
			Prohibit construction of developed recreation sites.
			Discourage or prohibit any public use which impairs research or educational values.
			Permit and encourage use by scientists and educators.
			Prohibit any direct habitat manipulation.
			Restrict livestock grazing to that essential for the maintenance of a specific vegetative type.
			Close RNAs to all wood and wood product removal.
			Use special use permits or cooperative agreements to authorize and document scientific activity.
			Withdraw RNAs from mineral entry in conformance with Section 204 of FLMFA of 1976.

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
LANDS (Cont.) Research Natural Areas (Cont.)			Withdraw RNAs from mineral entry following their designation as an RNA. Generally, physical improvements such as roads are not permitted. Limit trails to those needed for access to conduct research and for educational purpose. Extinguish wildfires endangering RNAs. Allow wildfires within the RNAs to burn undisturbed unless they threaten people or property outside the area or the uniqueness of the RNAs. Do not reduce fire hazard within RNAs. Close RNAs to all motorized vehicle travel. Take no action against endemic insects, diseases, or wild animals.
<u>FACILITIES</u>		Return proposed RNAs to multiple use management if they are not designated as RNAs.	
Road Design, Construction/Reconstruction, and Maintenance	L01 L12 L13	Roads shall be constructed or upgraded by the user to a standard compatible with the proposed use.	Roads will be constructed along the planned route. Require a permit or cooperative agreement before allowing snowplowing on Forest development roads.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES FACILITIES (Cont.)	MNH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
Road Design, Construction/Reconstruction, and Maintenance	L01 L12 L13		A temporary road shall be developed, maintained, and then closed and revegetated by the user when the road is no longer needed. Road closure rehabilitation standards will be developed on a site-specific basis. Commercial users will have maintenance responsibilities on Forest roads. These responsibilities will be described in the appropriate permit or plan. Users will be solely responsible for the maintenance of roads built for their own use. See Appendix K Selected roads will be closed seasonally to prevent resource damage and reduce maintenance costs. Improve major roads according to the Forest Action Schedule. Maintenance work will be prioritized as follows: 1. User safety. 2. Erosion control. 3. User comfort and convenience.
	L12	Low standard access roads will meet Humboldt Design criteria.	
	L19	Provide for maintenance on existing roads to allow for reasonable public use. Emphasis will be given to those roads causing resource damage.	

Forest-Wide Management Direction, Standards and Guidelines

PRACTICES	MTH	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
FACILITIES (Cont.)	CODE		
FMO Construction/Reconstruction	L24	Plan for new facilities and/or upgrading of existing facilities needed for Forest administration in accordance with the Forest Action Schedule.	Regulate the development of the road system to be consistent with resource management goals. Road standards will be limited to the minimum necessary. Maintain the system road network in accordance with annual operating plans. Transportation and resource programs will utilize roads constructed for oil and gas exploration whenever possible. Provide for needed construction or reconstruction of roads or trails in conjunction with the right-of-way acquisition system. Provide roads to trailhead facilities. Insure campground spur roads are level. Local, State and Federal construction codes will be followed. New construction will blend with the setting. Priorities for maintenance area as follows: 1. Correct health and safety deficiencies. 2. Correct structural deficiencies. 3. Implement energy saving measures. Administrative pasture fences will be maintained.
Facility Maintenance	L25	Maintain facilities needed for Forest Administration.	

Forest-Wide Management Direction, Standards and Guidelines

MTH		STANDARDS AND GUIDELINES	
PRACTICES	CODE	MANAGEMENT DIRECTION	
<u>FACILITIES (Cont.)</u>			
Facility Maintenance (Cont.)	L25	Dispose of facilities and or sites not needed for Forest administration, in accordance with the Forest Action Schedule.	Remove aging and excess facilities as new facilities become available.
		Correct health, safety, and sanitation deficiencies at all sites.	Upgrade facilities to meet health, safety, and sanitation standards on all sites according to the Forest Activity Schedule.
			Follow system operation and maintenance plans regarding potable water systems.
Radio System Operation and Maintenance	L35	Maintain radio system.	Conduct yearly inspections of all bases, repeaters, and portables.
			Repair all inoperable systems in a timely manner.
<u>PROTECTION</u>			
Fire Management Planning and Analysis	P01	Annually update fire management plans to maintain the level of fire readiness.	Emphasize cooperative fire protection through offset agreements, paid protection, and combined fire fighting forces.
			Annually update the following plans:
			1. Manning and specific action plan.
			2. Annual mobilization and operation plan.
			3. Fire prevention plan.
Fire Prevention	P02	Develop a fire prevention program directed towards reducing the number of fires.	Prohibit the use of fireworks.
			Fire restrictions or closures will be implemented during critical fire conditions.

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH	CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>PROTECTION</u>				
Fire Prevention		P02		All fire danger warnings or restriction notices will be removed no later than five days after the emergency is over. Investigate all wildfires. Emphasize fire prevention and presuppression efforts to maintain the number of person-caused fires below the previous five year average. Fire suppression methods will be selected that minimize or eliminate negative impacts on the resources. Suppression action on lands protected by another agency will be in accordance with that agency's direction. All damage from fire suppression activities will be repaired or stabilized prior to personnel and equipment leaving the fireline. Escaped fire situation analysis will consider the effect of wildfire on the ecosystem.
Fire Suppression		P04	Make an appropriate suppression response on all wildfires.	
		P05		
		P06		
		P07	Provide a level of protection that is appropriate to the value of the resource, management direction and threat to off-site developments and public safety.	
		P08		
			Forest fire support will be maintained to meet suppression objectives.	
Fuel Management			Follow guidelines established in Initial Attack Strategies for the particular management area.	
		P10	Fuels treatment and maintenance will be used to reduce the cost of fire suppression and break up fuel continuity.	Utilization of wood products will be the primary method of fuel reduction.
		P11		
		P12		
		P13		

Forest-Wide Management Direction, Standards, and Guidelines

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
FUEL MANAGEMENT	P10	Use prescribed fire by planned	Prescribed burning will comply with State
	P11	ignition when cost effective, to	air quality standards.
	P12	manipulate vegetation to benefit	Fuel reduction program will be directed towards
	P13	timber, wildlife, range or recreation.	high-risk fire areas and high-valued facilities.
	P14		
		Prescribed fires using unplanned	Coordinate planned ignition with State
		ignition may be used to duplicate the	agencies, cooperators and potentially
		recorded fire frequency, size, and effect.	affected individuals.
		Give priority to protecting natural	
		resources and visitors' safety.	
Law Enforcement	P24	Sign, post, and enforce orders and	Allow for patrols to enforce compliance with
		closures.	laws and regulations and to prevent resource
			damage.
			Employees routinely contacting the public will
			be properly identified by uniform and/or identification card.
		As appropriate continue cooperative	Cooperate with Federal, State, and local law
		law enforcement program with the	enforcement agencies in law enforcement
		counties.	activities involving National Forest lands and
			government properties.
			Each district will maintain liaison with local
			law enforcement agencies.
			Assist county sheriffs in search and rescue.
			Local authorities are responsible for enforcement of traffic and local laws on National Forest System lands.
		Investigate and take appropriate action	Periodically provide information to the news
		on apparent violations of federal laws	media and the public to inform them of ongoing
		and regulations.	activities, requirements, and guidelines.

Forest-Wide Management Direction, Standards, and Guidelines for Wilderness Areas

MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
MANAGEMENT DIRECTION MANAGE FOR THE RECREATION OPPORTUNITY SPECTRUM (ROS) INVENTORY MANAGE FOR THE VISUAL QUALITY OBJECTIVES OF PRESERVATION EXAMINE AREAS OF PROPOSED NEW TRAIL CONSTRUCTION, MINERAL EXPLORATION OR OTHER AREAS OF PROPOSED NEW SURFACE DISTURBANCE OR POSSIBLE VANDALISM OR DETRIORATION PROVIDE INFORMATION ON WILDERNESS AREAS CONSTRUCT OR RECONSTRUCT TRAILS AS SHOWN IN THE FOREST ACTION SCHEDULE MAINTAIN TRAILS AS SPECIFIED IN THE FOREST SERVICE TRAILS HANDBOOK	Continue to gather cultural and historical information. Inform visitors of regulations protecting cultural sites. Provide public with current information on the Wilderness Area at the District Office or Forest headquarters. Construct and reconstruct trails to appear to be a part of the landscape rather than an intrusion upon it. Design bridges to blend with the local wilderness. Abandoned trails will be removed from the Trail System Inventory. These trails will be stabilized to minimize erosion. Provide spur trails to scenic vistas and lookouts. Route trails away from camping areas, where people and livestock congregate, and away from ecologically fragile areas. Realign trails to follow the natural contour of land with minimal disturbance of soil and vegetation. Corduroy or punchon may be used for trail surfacing when needed for resource protection and user safety.

Forest-Wide Management Direction, Standards, and Guidelines for Wilderness Areas

PRACTICES	MTH	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RECREATION (Cont.) A12			Re-route main trails away from lakes or streams. Where possible, maintain a vegetative strip or screen between the trail and lake or stream. Generally, a buffer of at least 100 feet is desirable. Spurs providing access to lakes or streams may be constructed.
Trail System			Maintain only those blazes and rock cairns necessary to guide users across long, open, or rocky slope or through meadows. Existing blazes on trees along well established, heavily used routes will not be maintained.
Maintenance (Cont.)			Brush and limb out trails and clear deadfall to minimum width and height necessary for user safety.
Redesign and relocate trails:			
1. Where shortcutting of switchbacks is creating erosion problems. 2. To avoid wet meadows. 3. On hillsides where fire running water is eroding the tread. 4. Where there are multiple, parallel trails.			
Avoid constructing switchbacks, but where they are necessary, provide barriers made of natural materials to prevent shortcutting.			
Use rolling grades where possible.			
Use native materials for barriers to prevent traffic from widening the tread.			

Encourage local and state agencies and civic organizations to help maintain trails.

PRACTICES	MTH	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>RECREATION (Cont.)</u>			
Trail System	A12	Minimize trail signing.	Sign as follows:
Maintenance (Cont.)			1. Construct signs of wood with routed lettering and leave unfinished. 2. Show direction but not mileage on junction signs. 3. Mount signs on snags, natural posts, or rocks. 4. Each sign will have no more than three lines.
			Place signs as follows:
			1. Directional signs at system trail junctions only. 2. No more than two signs at any junction. 3. Boundary signs at the wilderness area boundary. 4. "Closed to motorized vehicles" signs at trailheads or where trails enter the wilderness area. 5. Administrative signs, such as "closed to camping" only where necessary for resource protection. 6. Interpretive signs, showing key natural features, travel routes and other information at major trail heads outside of the wilderness. 7. All entrance points to the wilderness area.
			Change signs to conform with Wilderness Standards following Congressional designation.
<u>WILDERNESS</u>			
Wilderness Use			
Administration	B03	Manage outfitter guide permits so as not to detract from the wilderness quality.	Require outfitter guides to pack in pelletized feed for their livestock.

Forest-Wide Management Direction, Standards, and Guidelines for Wilderness Areas

PRACTICES	MTW	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
WILDERNESS (Cont.)	CODE		
Wilderness Use Administration (Cont.)	B03	Use indirect management techniques to disperse wilderness visitors and reduce impacts. Protect the wilderness resource pending Congressional action on the wilderness recommendation. Manage wilderness at the standard service level.	Inspect base, line or spike camp for permit compliance. Require users to follow the "Pack-In - Pack-Out" policy. Contact trail riders and request that they not tie their horses to green trees. Request horse users to pack in their own feed and to rotate campsites every couple of days. Caches of cans and bottles will be packed out of the Wilderness each year as they are located by patrolmen. If use keeps increasing at the present rate, a permit system or other method on controlling and distributing people may be initiated in the future to encourage camping away from lakes, outfitter camps, or other heavily used user areas. Determine the current use and monitor subsequent use being made of the Wilderness to prevent over use. Maintain registration boxes at major entrance points and keep campsites clean. Encourage NO TRACE camping by written materials at trailheads and by personal contact. Patrolmen will contact wilderness users to promote wilderness ethics and notify them of hazards.

Forest-Wide Management Direction, Standards, and Guidelines for Wilderness Areas

PRACTICES		MNH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
WILDLIFE & FISH				
RANGE Range Resource Planning		C01	Work with Nevada Department of Wildlife on habitat studies and public surveys for input on any reintroduction of wildlife species into wilderness.	Transplants will be considered appropriate if species were formerly indigenous and where conflicts with other resources are minimal or can be mitigated.
		D01	Maintain or update allotment management plans to insure the range is improved to or maintained in satisfactory ecological condition and to identify and resolve all conflicting resource uses.	Update allotment management plans following wilderness designation to insure wilderness management guidelines are incorporated into management actions.
	Structural and Nonstructural Improvements	D03 D05 D06	Protect wilderness character.	Maintain natural vegetative composition and diversity.
RANGE Administration and Management	Noxious Weeds	D03	Maintain natural vegetative composition and diversity by treating introduced, noxious farm weeds if they threaten lands outside wilderness or are spreading within the wilderness (with Regional Forester approval within the wilderness).	New or reconstructed range improvements must be designed, located, and built of materials feasible to serve the purpose and the harmonious with the wilderness characteristics. Range improvements will be removed unless they are adequately maintained.
		D07	Coordinate management of livestock and recreation use to protect the wilderness character of the area.	Regulate grazing use on and adjacent to heavily used recreation areas to prevent deterioration of the wilderness resource and minimize user conflicts.
				Regulate recreation stocking to prevent deterioration of the forage resource at popular camping sites and fishing areas.

Forest-Wide Management Direction, Standards, and Guidelines for Wilderness Areas

PRACTICES	MTH	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>RANGE (Cont.)</u> Administration and Management (Cont.)	D07	Support predator control conducted by APHIS and state agencies.	Permit only temporary salt and bed grounds. Locate away from springs, streams, and lakes to prevent degrading water quality.
		Allow predator control only when necessary to protect threatened or endangered species or to prevent special and serious losses of domestic livestock.	Locate sheepherder camps where there will be little or no conflict with general public use.
		The Regional Forester will evaluate predator control on a case-by-case basis.	
		Livestock will be managed to maintain or enhance sensitive areas such as riparian and key wildlife habitats.	
		Protect sensitive plant or animal species.	Allotment management plans and annual opera- ting plans will provide for protection of sensitive plant and animal species.
<u>TIMBER</u> Timber Harvest Administration	E07	Permit no timber or fuelwood removal.	Fuelwood will be available for use only in conjunction with recreation use.
<u>SOIL & WATER</u> Administration	F02	Planning and special studies will be considered.	Soil studies will be conducted before new trails are constructed to aid in minimizing problems from natural erosion.
Rights/Use Management		Apply for State water rights to meet area needs in compliance with Nevada State water law.	Secure minimum flows on all perennial streams and springs for maintenance of stable stream channels and fisheries habitat.

MIH	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
CODE		
SOIL & WATER (Cont.)		
F04 Administration/ Management	Manage soil and water resources to protect watersheds and preserve water quality.	Complete water use inventory and update annually.
Air Quality		
	Manage the airsheds over the Forest to meet Class I air quality standards.	
Monitoring		
F09	Monitor air quality.	
MINERALS		
Site-Specific Technical Investigations		
G02	Conduct mineral validity examinations.	Claims covered by operating plans which propose surface disturbance will have validity examination performed by a Forest Service Mineral Examiner.
Processing of Exploration and Site-Specific Development Proposals		
G02	Obtain notices of intent for all proposed mining activities. Obtain plan of operation prior to allowing any significant site-disturbing activities.	Require proof of valuable mineral deposit prior to approval of operating plans.
G03		Require complete site restoration.
G05		Require reclamation bond.
G06		Respond to proposed operating plan with 30 days of receipt.
G07		When mining activity is detected in the Wilderness Area, the District Ranger will notify the operator of wilderness regulations, require an operating plan, and take other administrative actions as appropriate.
Leasables		
G04	If Congress designates wilderness, do not renew existing leases when they expire. Recommend to HLM "no lease" for pending applications.	Exploration and development of existing leases must not impair the wilderness character.
Processing of Site-Specific Development Proposals		
G05	Do not allow development of common variety minerals in wilderness.	

Forest-Wide Management Directions, Standards, and Guidelines for Recommended and Existing Wilderness Areas

PRACTICES	MIH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
LANDS			
Special Use Permits	J01 A08	Permit only those activities allowed under the Wilderness Act and which are compatible with the wilderness resource.	Proposals will receive an interdisciplinary analysis.
Boundary Location	J06	Locate and post wilderness boundaries as designated by Congress.	
Land Exchange	J13	Attempt to acquire private land within wilderness areas.	
PROTECTION			
Fire Prevention	P02	Develop a fire prevention program to reduce the number of wildfires associated with dispersed recreation.	
Fire Suppression	P04 P05 P06 P07 P08	Appropriate suppression response will be taken on all wildfires. During low fire intensity periods or when natural barriers can be utilized, cost plus net value change will be a prime consideration in determining appropriate action. Forest fire support will be maintained to meet suppression objectives.	Fire suppression activities will generally be limited to: 1. Hand tools on small fires. 2. Helicopters, powersaws, marine pumps, and aircraft-dropped retardant only with approval of the appropriate Forest Officer. 3. Demobilization by primitive methods unless such methods are not feasible because of the size of the fire, fire danger, equipment involved, or potential impact upon the wilderness resource.

The escaped fire situation analysis will consider the effect on the ecosystem.

Site rehabilitation will be completed to a point that restores or improves the site and protects the resources from additional deterioration.

Forest-Wide Management Direction, Standards, and Guidelines for Wilderness Areas

PRACTICES PROTECTION (Cont.)	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
Fuel Management		Follow guidelines established in Initial Attack strategies for the particular management area.	
	P10	Allow lightning fires to play, as nearly	Natural wildlife will be the primary
	P12	as possible, their natural role within	method of fuel reduction.
		wilderness.	
Law Enforcement	P14	Reduce to an acceptable level, the risks	
		and consequences of wildfire within	
		wilderness or escaping from wilderness.	
	P24	Enforce wilderness law.	Wilderness and recreation patrolmen will
Search & Rescue			inform users of the Wilderness regulations.
		Sign, post, and enforce orders and	Provide and maintain boundary signs where
		closures.	motorized equipment might enter the
			Wilderness.
			Periodically provide information to the news
			media and the public to inform them of on-
			going activities, requirements, and
			guidelines.
	P26	Provide for public safety.	The Forest Service will cooperate with the
			local Sheriff's Office to develop search
			and rescue plans and procedures.

D. PROJECTED FOREST PLAN OUTPUTS, ACTIVITIES, AND COSTS

Tables IV-1, IV-2, and IV-3 on the following pages display projected average annual outputs, activities, and costs for the Forest Plan.

TABLE IV-1 - Projected Average Annual Outputs for The Forest Plan

OUTPUTS	1986	1990	1995	2000	2010	2020	2035
RECREATION (RVDs)							
Developed	209180	217440	221880	227680	231000	235280	243880
Dispersed	385651	412679	423744	431347	445533	457567	470687
RCS-Semi-Primitive							
Normotorized	34351	36728	37713	38390	39652	40724	41891
RCS-Semi-Primitive							
Motorized	177088	189832	194922	202733	218311	228788	240050
Roaded Natural	332290	345730	352789	362011	367290	374095	387769
Rural	7112	7393	7544	7741	7854	8000	8292
Primitive	36866	40030	41103	41841	43217	44385	45657
WILDERNESS							
Acres	333000	333000	333000	333000	333000	333000	333000
Recreation Use (RVDs)	45355	56076	58907	59321	59949	60645	61451
RANGE							
Permitted Livestock Use (AUMs)	301690	303706	300298	302463	307585	314211	316621
Wild Horse & Burro Use (AUMs)	1471	1500	1500	1550	1600	1600	1600
WOODLAND PRODUCTS							
Fuelwood (Cords)	5131	5123	5322	5339	5372	5395	5395
X-Mas Trees (Trees)	2850	5011	3589	2814	3363	3576	3552
Peanuts (Pounds)	29753	15707	11171	11892	11932	11932	12099
WATER & SOIL							
Water meeting Forest goals (M Acres Ft)	936000	963000	977000	991000	1018000	1045000	1086000
MINERALS							
Acres Leased (Acres)	344869	374587	384305	388320	392336	392336	392336
WILDLIFE (WFDUs)							
Total Use	149402	149694	150206	150682	151272	152020	152721

TABLE IV-2 - Projected Average Annual Activities For The Forest Plan

ACTIVITIES	1986	1990	1995	2000	2010	2020	2035
WILDLIFE & FISH							
Structural Habitat							
Impvt. (Structures)	89	114	0	0	0	0	0
Nonstructural Habitat							
Impvt. (Acres)	233	930	275	275	275	275	275
WOODLANDS							
Timber Stand Impvt. (Acres)	13	53	56	56	58	61	62
WATER & SOIL							
Improvement (Acres)	19	19	18	17	15	15	15
MINERALS							
Leases and Permits (Oases)	226	226	239	234	227	233	233
HUMAN & COMMUNITY DEVELOPMENT							
Senior Citizens (Enrollees)	8	8	11	11	11	11	11
Volunteers (Enrollees)	7	7	10	10	10	10	10
FACILITIES							
Trail Const. and							
Reconstruction (Miles)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Arterial and Collector							
Road Reconstruction (Miles)	0.0	0.0	5.0	5.0	5.0	5.0	5.0

TABLE IV-3 Projected Average Annual Costs for the Forest Plan
Thousands of Dollars (1982)

INDICATOR	1986	1988	1990	1995	2005	2015	2030
A20 RECREATION OP	570.89	599.95	551.37	466.33	418.18	417.19	380.93
A30 RECREATION CON	52.27	89.42	99.45	34.01	49.87	28.13	21.16
A40 COOP LAW ENFO	8.32	8.48	8.70	8.94	9.12	9.29	9.31
B40 WILDERNESS OP	135.08	138.90	132.36	134.44	120.12	118.87	80.40
C20 WILDLIFE & FISH	165.80	164.31	157.60	160.93	156.49	153.15	146.94
C30 WILDLIFE IMP	84.42	87.96	88.28	74.58	74.35	72.66	73.53
D20 RANGE RES O&M	604.69	571.05	582.01	583.31	464.77	440.92	382.32
D30 RANGE RES IMP	243.33	248.38	243.14	252.24	204.04	207.93	155.22
E20 TIMBER SALES	47.90	50.47	51.85	51.61	50.65	49.65	47.90
F20 WATER & SOIL	87.72	87.42	82.05	81.70	72.10	67.85	61.67
F30 WATER & SOIL IMP	22.67	23.24	23.98	20.36	17.90	18.28	18.79
G10/20 MINERALS	326.60	327.86	314.67	321.72	317.40	310.39	305.04
H10 RURAL COMM & HD	61.19	61.19	61.19	61.83	61.83	61.90	61.83
J20 FOREST LEVEL	3.09	5.07	4.80	4.55	4.23	4.13	3.77
J30 LAND OWNERSHIP	71.14	117.05	77.02	56.30	54.72	53.43	51.53
L40 F&AO STRUCT MICE	291.23	289.23	273.20	281.99	280.61	269.23	259.26
L50 ROAD MICE	223.22	221.20	200.44	211.35	205.29	194.79	187.87
LFO F&AO CONST	148.87	207.35	196.49	214.99	145.39	179.82	152.37
LGO ROADS CONST/RECONST	192.03	172.72	173.67	346.72	350.88	368.11	381.65
P20 FIRE PROTECTION	181.24	180.67	174.83	179.25	178.78	176.52	158.10
T10 GENERAL ADMIN	807.59	807.59	807.59	807.59	807.59	807.59	807.59
TOTAL ALT/LEVEL	4329.73	4459.51	4306.10	4354.75	4044.78	4011.42	3748.71
GRAND TOTAL	4329.73	4459.51	4306.10	4354.75	4044.78	4011.42	3748.71

E. DESIRED FUTURE CONDITION OF THE FOREST

This section is a description of the desired future condition of the Forest resulting from implementation of the Preferred Alternative described in the accompanying FEIS.

Recreation

Developed facilities will be operated at a reduced service level during the pre- and post-vacation periods. All facilities will be operated at the standard service level during the summer vacation period from June 1 to September 10.

Developed sites, both public and special use, will be crowded or overcrowded during peak use periods. The condition of developed recreation facilities will be improved to maintenance class 1.

The condition of riparian areas within developed recreation sites will be maintained or improved. Vegetation management plans will be developed for all heavily used sites.

Trail conditions will be improved. Investment in trails will not be lost through lack of maintenance. Adequate trailhead facilities for dispersed recreation will be provided.

Opportunities to provide interpretive information will be pursued.

Projects that will benefit public health, safety, sanitation and water supplies have highest priority for reconstruction. An average of 20 camping units (100 PAOT's) will be rebuilt annually over a 30 year period to replace worn out facilities. Some new construction will be relocated off floodplain areas to avoid flood damage.

Recreation special uses will meet at least minimum environmental and public service standards. Trailhead parking and sanitation facilities for cross-country skiing and snowplay will be provided at trailhead locations.

Demand for developed recreation - public will be met until about the year 2000 when the Forest will again be looking at recreation demand.

Supply for dispersed recreation will exceed demand through the planning period.

Areas not needed for timber harvest and mineral development will be maintained for primitive recreation: about 50 percent of these areas will be allocated to nonmotorized recreation and 50 percent to motorized.

Completion of a comprehensive Cultural Resource Overview by 1988 will help to guide management decisions and direction and will provide a necessary link to the Nevada State Historic Preservation Plan. In the Overview, areas will be delineated for moderate and high archaeological sensitivity so that work can be targeted for completion of a Forest-wide cultural resource inventory.

The development of an inventory of National Register properties will provide a useful planning tool for the effective management of the cultural resource in relation to other resource needs. This Plan provides for the National Register nomination of at least one property every two years until the potential is reached. The Forest also will develop and implement a plan for the public interpretation, enhancement, and protection of National Register quality properties. This Cultural Resource Plan will be an integral part of the Overview mentioned above.

Where motorized cross-country travel causes unacceptable resource damage, user conflicts or safety problems, further ORV restrictions may be imposed.

A system of 1,000 miles of summer trails will be maintained, all at Level 2 or better. Five miles of trail will be reconstructed or constructed annually. Snowmobile and cross-country ski trails will be provided. No additional trails were found suitable for inclusion in the National Trail System.

Integrated pest management techniques will be used to protect, maintain or enhance recreation resources.

Wilderness

This alternative recommends the following roadless areas be designated wilderness areas. These are preliminary administrative recommendations.

This recommendation will receive further review and possible modification by the Chief of the Forest Service, the Secretary of Agriculture and the President of the United States. Final decisions on wilderness designation have been reserved by the Congress itself.

<u>Area</u>	<u>Acres</u>
Mount Moriah	60,700
Bristlecone (Wheeler Peak)	51,700
Ruby Mountains	55,600
Grant Range	43,100
Jarbridge	26,400
East Humboldt	18,500
Soldier Lake	<u>12,300</u>
	268,300

These areas will be managed and operated at the full service level. All other roadless areas will be managed for uses other than wilderness.

Wildlife and Fish

Current habitat of threatened and endangered species will be maintained, and no conflicts with other uses will be allowed. In addition, opportunities to establish peregrine falcons in currently unoccupied habitat will be implemented in cooperation with the Nevada Department of Wildlife, U.S. Fish and Wildlife Service and the Peregrine Fund.

Fisheries habitat in poor condition will be improved through coordinated management with other resources and limited habitat improvement projects designed to improve streambank cover, pool areas and streambank stability. Existing riparian habitat will be maintained in at least satisfactory ecological condition. Big game winter range capacity will increase, predominantly through direct habitat improvements and coordination with the fuelwood program and livestock grazing. Big game and upland game summer ranges will be improved through coordination with livestock and recreation activities.

One of the goals of the preferred alternative is to maintain habitat for all MIS at levels that exceed requirements for minimum viable populations. Populations of all hunted and fished MIS are expected to increase over current levels, particularly fish.

Range

This alternative will produce 316,620 AUM's by the end of the planning horizon. The range conditions will continue to improve from the present 69 percent in satisfactory ecological condition to at least 80 percent. Allotment management plans will incorporate objectives and guidelines to improve coordination with other resources. The program for noxious weed control will be strengthened with control efforts on priority I and II noxious weeds.

Sensitive plant species will be maintained.

The Cherry Springs, Monte Cristo and Quinn Wildhorse Territories will be managed according to the plans.

Key big game winter ranges will continue to improve through close coordination efforts and improvement projects.

Predator control will be allowed on grazing allotments where need is demonstrated. Integrated pest management techniques will be used to protect, maintain and improve range resources.

Timber

The pinyon-juniper cover type will be inventoried to determine its management potential by identifying management needs and opportunities and productivity levels, and subsequently identifying acceptable harvest levels.

The supply of firewood created by this alternative when added to existing dead timber, will meet the demand through 2030.

Soil and Water

Water quality will improve at a moderate level, while soil productivity and quality will improve at a high level. Watershed improvement will occur at a moderate rate, yet current needs for watershed improvement will not be satisfied by the end of the planning period. Reductions in soil erosion will increase with watershed protection, proceeding at a moderate level through implementation of soil and water conservation measures. Soil and water resource inventory will continue as will present coordination with city, county and state agencies.

Water Rights

Congress has directed the Forest Service to administer National Forest System lands for multiple-use purposes. These purposes have been stated in the Organic Administration Act, Multiple-Use Sustained-Yield Act, Wilderness Act, Wild and Scenic Rivers Act, and other legislation and Executive Orders. The water needed to successfully accomplish the programs mandated by these acts and Executive Orders will be protected.

Water needed for National Forest System management but not available under State law and not meeting the Supreme Court criteria for a reserved right under the Organic Administration Act, will be secured by citing the applicable Federal and conditioning occupancy permits.

Whenever water rights are authorized by Federal or State law, these will be quantified, documented, and recorded. Applicable fees will be paid by the benefiting function.

A Federal reserved water right will be asserted for water needed for program of watershed management including fire protection. A reserved right will also be used to acquire water needed in the form of instream flow sufficient to maintain stability of the stream channel for the purposes of securing favorable conditions of water flow and maintenance of fish habitat.

Quantification of stream flows to secure favorable conditions of water flow will be accomplished over a ten-year period by priority. Immediate quantification will be done in support of Forest Service protests of water right applications by others and for adjudications (Clover/Ruby Valley and Steptoe Valley). Second priority will be the progressive quantification of instream flow needs as shown in Table IV-4.

TABLE IV-4
Areas Proposed for Instream Flow Quantification

<u>Priority</u>	<u>Area</u>
1	Snake Division
2	Ruby Mountains
3	East Humboldt
4	Jarbridge Ranger District
5	Mountain City Ranger District
6	Ely Ranger District
7	Santa Rosa Ranger District

Minerals

The number of leases, permits and operating plans is expected to increase slightly throughout the life of the plan. Withdrawals and legislative requirements will restrict mineral development on 356,888 acres.

The Forest will expedite the processing of oil and gas lease applications and locatable mineral proposals.

Funding will allow proper evaluation of 234 leases and operating plans by the end of the planning horizon.

-- Locatable mineral operations proposals will be evaluated on a case-by-case basis through the environmental analysis process. Sufficient detail will be required in the operating proposals to ensure compliance with the approved plan.

-- Reclamation will receive greater emphasis. Operators will be responsible for all reasonable reclamation. Reclamation plans will be developed for each operation, with the technical assistance of Regional Office experts in the more complex cases.

-- Compliance inspections will be performed on a regular basis to insure the operation is being conducted to minimize surface resource impacts and unnecessary or undue degradation of the surface resources.

-- Bonding requirements will be sufficient to reclaim the surface resources impacted by the operation. Costs will be determined by using standard cost estimating guides and the technical expertise of S.O. and R.O. specialists.

-- Mineral/energy road development will be coordinated with the Forest transportation plan. Existing and planned roads will be used whenever possible.

-- Seismic exploration will be allowed in proposed or designated wildernesses only in those cases where it will not cause degradation of the wilderness characteristics.

-- Leasable mineral/energy applications will be evaluated on an individual basis. The decision to lease and site-specific stipulations will be determined on a site-by-site basis. Development activities will be addressed by an interdisciplinary field analysis and environmental assessment.

-- Locatable mineral exploration, development and production activities are expected to continue at a high level. Seismic exploration should increase as further oil/gas exploration takes place in the valleys flanking the Forest. Geothermal exploration will likely remain at a low level.

Fire Protection

Appropriate suppression response will be taken on all wildfires as provided in the "Initial Attack Strategies" for each management area.

Prescribed fire from planned ignitions will be used for resource improvement. In the Jarbidge Wilderness and recommended wilderness areas, unplanned ignitions will be used to maintain natural ecosystems. Manipulation of vegetation will provide adequate fuels reduction. Cooperative fire protection will continue to be emphasized to provide for joint fire protection. An active fire prevention program with cooperating agencies will be developed.

Lands

Lands will be acquired or disposed of as shown on the land adjustment maps. About 600 acres of land will be exchanged annually. Land exchange offers will be responded to within three months, and one land exchange a year will be completed.

Access to Forest land will be assured by acquisition of road and trail rights-of-way. Two road or trail rights-of-way will be acquired annually until needs are met.

High priority will be given to meeting standards for dam inspection. Emergency preparedness plans will be prepared for all dams.

Utilities will be allowed in suitable corridors.

Current mineral withdrawals will be evaluated as required by law. It is expected that this evaluation will result in the revocation of some withdrawals. New mineral withdrawals will be evaluated for future high investment sites that also have high mineral potential.

Special-use fee returns will increase as a result of new uses and higher fees.

Property boundaries will be identified sufficiently to manage resource activities and prevent inadvertent trespass.

Five Research Natural Areas will be proposed. An Establishment Record will be prepared and submitted to the Regional Forester for these five areas. Designation of these Research Natural Areas will assist in meeting research needs on the Humboldt National Forest and elsewhere in the western United States.

Facilities

Buildings and Administrative Sites - Those buildings and associated support facilities essential to carrying out resource and management objectives shall be retained. All health and safety hazards shall be corrected and these buildings and utility systems shall be replaced or rehabilitated as required to continue to meet health and safety standards. The purpose of the maintenance program and rehabilitation, when appropriate, is to protect and enhance the facility investment and to keep maintenance costs reasonable. Some nonessential facilities will deteriorate over time to the point they will no longer be able to be safely used and they will have to be removed or destroyed. All CCC-Era buildings will be evaluated as cultural properties.

Transportation - The emphasis on the road system will be to provide safe access to the Forest. Five miles of the arterial and collector road system will be reconstructed annually starting 1991. The objective of the reconstruction will be to keep these main roads safe and passable. The reconstruction will correct any safety hazards, provide for protection of

resources and correct any maintenance problems. User comfort and convenience will not be a prime consideration. Those roads essential to meeting resource needs and management objectives will receive attention first.

Local road construction and reconstruction will occur almost solely in support of mineral activities. Most of the roads associated with the minerals program will be very low standard exploration roads, through some higher standard roads may be built in association with mine development. All mining roads will be built and maintained by the commercial user.

Maintenance of Forest roads will emphasize user safety, protection of resources and maintaining road access. Primary maintenance efforts will be directed to keeping roads open and safe particularly the arterial and collector roads and those local roads essential to meeting resource and management objectives. The proper signing of the roads is considered essential to user safety.

Communications - The Forest will establish a Forest-wide microwave and radio communication network by 1995. Existing radios are now being replaced as quickly as budgetary constraints allow with radios that will be compatible with the anticipated microwave and radio system.

Aerial Photography - Resource aerial photography is scheduled for replacement on twenty-year intervals. The preferred replacement schedule would be at ten-year intervals. Due to budgetary constraints, the ten-year interval was not feasible.

Visuals

The VQO's for this alternative will be:

CATEGORY	ALTERNATIVE K (M ACRES)	M ACRES CHANGE FROM PRESENT INVENTORY
Preservation	268	-312
Retention	84	0
Partial Retention	674	248
Modification	822	0
Maximum Modification	680	0

Law Enforcement

Increasing public use of the Forest will increase law enforcement problems. Cooperative law enforcement agreements with local law enforcement agencies will be continued.

F. MANAGEMENT AREA DIRECTION

This section describes the 16 management areas on the Humboldt National Forest and the management direction and standards and guidelines that apply to each area. The standards and guidelines which apply universally to all management areas are discussed earlier in the Chapter. The Forest action schedules which list, by resource, specific projects to be accomplished each year are shown at the end of this chapter.

The Forest was divided into management areas to facilitate implementation of the Forest Plan. Each management area is composed of contiguous lands with similar topography, geology, and land and resource uses. Seven of the management areas encompass the existing and recommended wilderness areas on the Forest. While all will be managed under the principles of multiple-use, different resources will be emphasized in different areas. The write-up for each management area includes:

1. A location map (on the Forest map, issued separately from this document).
2. The management area number and acreage.
3. A brief description of the physical characteristics and significant resource situations or uses.
4. The management prescription for the area.
5. The proposed and probable management practices, the Management Information Handbook (MIH) code for these practices, the management direction and standards and guidelines.

Management Areas, listed by name and acres follow:

<u>AREA NAME</u>	<u>ACRES</u>
Mountain City	518,031
East Humboldts	95,892
East Humboldts Wilderness (Recommended)	18,509
Ruby Mountains	263,971
Ruby Mountains Wilderness (Recommended)	55,578
Soldier Lake Wilderness (Recommended)	12,314
Jarbridge	175,960
Jarbridge Wilderness (Existing and Recommended)	91,067
Mount Moriah	44,558
Mt. Moriah Wilderness (Recommended)	60,732
Schell	281,478
Snake	128,669
Bristlecone Wilderness (Recommended)	51,712
Ward Mountain	39,797
White Pine	344,575
Quinn	165,460
Grant Wilderness (Recommended)	43,144
Santa Rosa	268,493

Any recommendation for wilderness made in the following management areas is a preliminary administrative recommendation which will receive further review and possible modification by the Chief of the Forest Service, the Secretary of Agriculture, and the President of the United States. Final decisions on wilderness designation have been reserved by Congress.

MOUNTAIN CITY MANAGEMENT AREA - 518,031 ACRES

Description

The Mountain City Management Area is located north of Elko, Nevada, in northeastern Elko County. The gross acreage within the management area is 518,031 acres; 479,215 acres of which are administered by the USDA Forest Service and the remaining 38,826 acres are privately owned. The management area surrounds the town site of Mountain City, Nevada, which was a withdrawal from the National Forest in 1941 by Congressional action.

The highest points on the management area are: Jacks Peak - 10,198 feet; Copper Mountain - 9,911 feet; McAffe Peak - 10,439 feet; and Merritt Mountain - 8,762 feet. The lowest elevations are along the Bruneau River which are near 5,000 feet.

Main drainages are: the Bruneau River, Meadow Creek, McDonald Creek, Owyhee River, and the North Fork of the Humboldt River. These drainages flow through deep canyons and valleys with relatively short and steep drainages. The southeast part of the District is drained by the Humboldt River. The northern and southwestern portions of the area drains into the Snake River (Columbia River system) via the Bruneau and the Owyhee Rivers.

Approximately 88,600 recreation visitor days are spent annually on the management area. Hunting and fishing activities are responsible for the majority of visits. Recreation use increased to a high of 180,000 visitor days in 1972, but dropped steadily each year until 1979. In 1980, use showed an upward trend. The effects of a quota deer season (fewer permits), changes in the hunting and fishing regulations, and higher cost of gasoline were probably causative to this reduction of use from 1973 until 1979.

Wildhorse Reservoir (mostly outside the Forest boundary, however the dam is on the Forest) attracts the majority of summer visitors. There are three developed recreation areas; Big Bend Campground, Jack Creek Campground, and the Wildhorse Crossing Campground. State Highway 225 from Wildhorse Dam to near Mountain City is a pleasing scenic drive and is a popular fishing area. There are numerous undeveloped camping and picnicking sites which are used primarily during the fall hunting seasons each year.

Of historical interest are old mining towns such as: Mardis, Charleston and Gold Creek. There are also numerous small campsites utilized by early Americans scattered throughout the management area. Some of these have been excavated and catalogued with no significant sites located to date.

Scenic areas of interest are the high portions of the Independence Mountains, the Bull Run Mountains, Pennsylvania Hill, Merritt Mountain, Copper Canyon, and Copper Basin. Most of these areas can be reached by vehicles. Backpacking as a recreation experience has a very low occurrence with the exception of Camp Draw, a primitive trailhead facility to the Jarbidge Wilderness Area.

The airsheds over the management area are clear and clean. Freeport Gold completed a mill complex in June of 1981 and has been processing ore since then. They utilize a small coal-fired plant to heat water, but low sulphur coal is used with little or no resultant impact on air quality. No cities, large industrial plants, or activities are present on or adjacent to the management area that affect this resource. This clear air adds tangible enjoyment for recreationists and travelers.

A substantial number of deer use the area as summer range. Primary deer winter areas within the management area include the southwest side of the Independence Range from Taylor Canyon to Marsh Creek, the upper Buneau River from Rattlesnake Creek to Coon Creek, lower Meadow Creek, and the Owyhee Canyon from Wildhorse Dam to Mountain City. Areas used during open winters include low elevations from Willard Creek to Indian Creek, and from Jim Creek to Stump Creek. The largest wintering herds are in the Bruneau River/Meadow Creek and Jeritt Canyon/Marsh Creek areas.

Since 1972 deer numbers have declined. The primary browse available in winter is sagebrush. In general, bitterbrush and other browse species are not widespread on winter ranges and make up a much smaller portion of the available browse species. The range has not shown signs of overuse with the present deer population.

Many areas continue to have more beaver than the available willow and aspen food supply can support. This creates some problems with loss of willow along stream courses and with aspen stands a good distance away from streams. Beaver activities also cause culverts and roads to wash out during heavy spring flow.

Predators include bobcats, coyotes, and mountain lions. The coyote population has increased in the past five to six years with a resultant increase in sheep losses. In areas where domestic sheep losses are heavy, there is an ongoing coyote control program. APHIS is responsible for this control and works closely with the District Ranger. Methods of control and location of control devices are evaluated before any action is taken. Coyote impact on the deer population is not known, but may be substantial.

Riparian areas consist of narrow stringers along all perennial water courses and numerous small meadows scattered throughout the management area. Increasing emphasis on the importance of these areas for diversified wildlife habitat is occurring. In some areas, livestock grazing in riparian zones is too heavy and is creating conflicts with other values. This is primarily occurring on allotments without completed management systems and/or a low level of improvement development.

A good variety of raptors occur with known resident species including the golden eagle, prairie falcon, owls, redtail hawk, marsh hawk, goshawk, osprey, and several lesser hawk species. Migrating waterfowl and summer nesting sandhill cranes also use this area. At least nine active golden eagle nests are present.

Fishing streams are limited, but streams which run yearlong support good trout populations and receive some fishing pressure. Limited stocking is practiced by the Nevada Department of Wildlife. Species found in most streams are eastern brook and rainbow trout. A high incidence of nongame fish is found in the Bruneau River and some tributaries to the Owyhee River.

A threatened species of fish, Lahontan cutthroat trout, is present in streams on the east side of the Independence Mountain range. These streams are: Mahala Creek, Gance Creek, Warm Creek (a tributary of Gance Creek), the lower portion of California Creek, Foreman Creek, North Fork of the Humboldt River, and Cole Canyon (a tributary of the North Fork). An aquatic survey was completed during the summers of 1978 and 1979 on these streams. Many more occupied streams than anticipated were found during these studies. Because of the more widespread distribution of this fish than originally thought, efforts have been made for the U.S. Fish and Wildlife Service to delist the species.

Upland game birds occur on much of this area. Species include chukar partridge, California quail, sage grouse, Hungarian partridge, and blue grouse. The Nevada Department of Wildlife has transplanted some sharp-tailed grouse into traditional past habitat areas on the management area and has introduced ruffed grouse in suitable areas.

A large quantity and variety of small nongame bird species occur over most of the management area. Many of these bird species are migratory and only spend from a week to a month in this area.

Winter game range is considered fair or better with small, but good stands of bitterbrush, early maturing grasses (Idaho fescue, cheatgrass, and some blue grass) and both low and big sagebrush. Plant vigor is good and soil stability is rated as fair or better. Bitterbrush plants are mostly mature and overmature with poor regeneration. In addition, recent rodent girdling and tent caterpillar defoliation has damaged some bitterbrush and serviceberry plants.

Livestock grazing has long been the principal use on the management area which permits over 100,000 animal unit months of actual grazing annually. This grazing use is the primary source of summer forage for cattle and sheep operations. These operations use private land and adjacent BLM range for spring, fall and winter grazing, with the exception of five allotments which are grazed from early spring to early winter. Winter grazing by cattle is also permitted on the Bruneau Winter Allotment. Sheep numbers continue to decline primarily due the difficulty of obtaining experienced and reliable herders, rising production costs, and extensive mining operations.

Livestock owned by thirty-seven permittees graze on fifty-two allotments which is one of the most important contributions to the economy of the management area, especially to the dependent community of Mountain City.

Of the total of 479,000 Forest Service administered acres, 403,000 are listed as suitable for livestock grazing. Overall, range condition is listed as fair or better. In some instances, permitted livestock use exceeds carrying capacity.

The North Fork/Jack Creek sheep driveway is 16 miles long and receives moderate to heavy use on an annual basis. Vegetation and soil conditions are fair but contain some areas with poor condition and minor soil erosion. A slow but apparently steady improvement in soil and vegetation conditions has occurred in the last five years. This is primarily due to less sheep use.

The multi-agency Saval Research Project has been ongoing since 1978. This long-term study with the BLM as the lead agency is designed to intensely study the effects of a grazing system on all other resources within the study area. "Base Line" data has been collected, the approved studies implemented, and part of the improvements on private, BLM, and Forest Service administered lands completed. Total acreage of the project is 58,757 of which 16,841 is National Forest, 28,091 is BLM, and 18,825 is private.

Noxious weeds including black henbane, whitetop, Canada thistle and leafy spurge occur over various parts of the area. Leafy spurge may become a problem especially in the North Fork drainage, Mountain City, and Sunflower allotments due to infestations on adjacent private lands. Soil disturbance through mineral activities are also contributing to the increase in noxious weeds, particularly in the Independence Range.

Four conifer species: alpine fir, juniper, limber pine, and whitebark pine are present in small stands. Aspen is the common broad leaf tree species and is found primarily along water courses, wet sites, and in snowbank areas. Very little of the timber (aspen, or conifer) is merchantable due to small stand size, small diameter and poor quality. Aspen is considered the most important species because it stabilizes the soil along the stream courses, provides shade for livestock, habitat for wildlife and fish, and a scenic environment for Forest visitors.

Some aspen is sold commercially as posts and poles to local ranchers, but this type of timber use is minimal. A few conifers are sold as Christmas trees for local use. No commercial sales of Christmas trees have been made in the past due to the limited occurrence of conifers. Considerable firewood is gathered each year by local residents and people from the Duck Valley Reservation. A minimum \$5.00/cord firewood permit is required. Approximately 430,000 board feet of firewood is sold annually. Mahogany is present but not in enough volume to have significant commercial potential.

Annual precipitation varies from 8 to 50 inches. Most of the precipitation falls as snow, with spring rains also adding considerable moisture. It is estimated that the management area produces approximately 380,000 acre-feet of water to off-Forest users. There is near total dependency upon the management area for water--both for irrigation and domestic uses. Needs for high quality water are increasing in the this area of Nevada. Because water is limited in the State, this resource is at a premium.

The State of Nevada is becoming increasingly aware of its water needs. "Water Rights" actions and planning is increasing as the culinary, livestock, irrigation, and industrial demands for water make Nevada's shortage of water more obvious.

Most streams are in a stable condition. Localized areas of streambank or headcutting are still occurring but stable and/or improving streambank conditions are present over the vast majority of the area. Some of these unfavorable conditions may be aggravated by livestock grazing on sensitive soils.

Mining and exploration activity has increased at a rapid pace throughout the management area. Valuable deposits of gold, silver, uranium, and barite have been discovered. The management area is highly mineralized, consequently additional exploration and ultimately future development can be expected.

The discovery of disseminated gold in the Independence Mountains led to extensive exploration and culminated with the development of Freeport Gold Company's mine/mill complex. This project produces about 300,000 ounces of gold each year. Proven ore reserves will sustain this operation for over 10 years. Continued exploration drilling on Freeport's claim block has produced additional ore reserves. Three major exploration programs are being conducted on new disseminated gold properties as of 1984.

Small scale mining operations are scattered throughout the management area. These range from small open-pit mines to placer mining and dredging. The majority of current operating plans cover exploration activities such as drilling, trenching, and road building. The major impacts from mining activity are associated with the disturbance caused by construction of roads and drill pads. These impacts are generally short term and can be mitigated with proper reclamation requirements. Reclamation practices are proving to be successful in returning disturbed areas to productive status.

There are 38,816 acres of private land within this management area. Much of this land occurs in 40 and 80-acre tracts located at springs and along stream bottoms. Land exchanges have served to ease the administrative problems and provide other benefits to National Forest users. Lack of legal access across private land to the National Forest is a moderate problem. Access is needed along the east side of the Independence Mountains and the west portion of the management area.

At present, there are approximately 60 special-use permits categorized into the following headings: utilities and communication, agricultural, transportation, water, community, recreation, and industrial. Telephone and powerlines authorized by permit provide needed utilities for persons living within and outside the Forest boundary. In addition, a TV antenna site, sewage disposal ponds, a water collection system, and a culinary water line are under permit on National Forest lands to benefit the residents of Mountain City. Numerous mining roads are presently authorized by permit and more are anticipated due to the large increase in mining related activities.

Soils in the management area have developed from a variety of different parent materials including sedimentary material, volcanic and rhyolitic material, and granitic material. The sedimentary influence is greatest in the Independence Range while the influence of volcanic and rhyolitic material is greater in the north-central part of the area. The influence of granitic material is greatest to the north and east.

Soils depths to bedrock vary from eight inches or less near ridge tops to six feet or more in drainage bottoms. Most of the soil surface horizons are moderately fine to fine textures. Generally, erosion hazard is slight to moderate, dependent upon the percent of the slope.

There are 653 miles of inventoried Forest roads and an estimated 250 miles of uninventoried roads. Vehicle use during the fall and spring "wet" periods are a concern due to the underlying clay strata on most roads.

Temporary and permanent road closures are only partly successful due to the rolling topography and the length of time needed to administer the closures. This situation results in the need for substantial maintenance annually but has been partly alleviated with the completion of rock aggregate surfacing on some roads. Road maintenance, except on several high standard roads, is poor to inadequate and only occurs once every four to five years. Erosion problems resulting from the road system are present. Serious erosion problems are present on the west side of the management area.

The transportation system is of adequate quality with the possible exception of access to the headwaters of the Bruneau River where the existing road lies primarily on private land.

Following is a list of administrative facilities within the management area:

1. Mountain City Ranger Station

Four dwellings, one duplex, one garage, one workshop, one fire warehouse, two potable water pump stations, two sewer systems with one large lagoon, one barn, one hayshed and storage yard and one bunkhouse are located on a 750-acre administrative site.

A long-range plan has been developed to move the administrative site located on a potentially hazardous floodplain to a nearby upland location. The office is under a lease agreement in Mountain City and has been operational since October of 1980. There is a need for owned rather than leased office space.

2. Gold Creek Work Center:

One dwelling, one bunkhouse, one generator/workshop, one gas house, two storage buildings, one kitchen/mess hall, two one-room crew buildings, and one storage yard are located on a 222-acre site. This site has been used in the past as a residential complex for Human Resource Programs.

The Gold Creek Site is 25 miles from the Mountain City Ranger Station. Meadows at this station provide fall grazing and hay for the District pack and saddle stock.

3. 76 Creek Guard Station:

One-room guard station on a 60-acre site.

4. Merritt Mountain Radio Relay:

One small concrete building which houses the only Forest Service Link Relay on the management area.

The Merritt Mountain radio relay gives adequate radio coverage for approximately 75 percent of the area. Access to the site for repair and maintenance is difficult, especially during the spring and fall "wet" periods. During the winter, access is dependent upon favorable snow conditions to enable over-snow machines to reach the site. The south and west sides of this management area currently do not have adequate radio coverage.

A public service site of 280 acres in Section 21, T44N, R52E, was withdrawn from mineral entry. No improvements are on the site.

In 1905, 80 acres were withdrawn for an administrative site in Section 21, T40N, R54E. This undeveloped site is on Mahala Creek, about a half-mile east of the contiguous Forest boundary.

Cover type and climatic variations throughout the management area typically cause different burning conditions and hazards. The Bruneau River and Meadow Creek drainages account for a large percent of annual acreage burned. In this area annual grasses or dry stands of flammable cheatgrass and steep slopes contribute to the rapid spread of fires. Both of these areas are high value deer winter ranges and part of this important deer winter habitat has been lost since 1958, due to large rapidly moving fires.

Fires in this whole area often move extremely fast during the burning period but generally, lay down at night. Nearly half of the fires have been man caused. Rate of spread over most of the area is classed as medium to high, with low resistance to control. Initial attack responsibilities have been contracted to the Nevada Division of Forestry since 1980.

The use of fire as a management tool has not been explored intensively. However, the potential to reap some benefits clearly exists.

Management Prescription

Recreation:

Existing developed sites will be improved and maintained at Big Bend, Jacks Creek, and Wildhorse Crossing campgrounds. Dispersed recreation will be emphasized on the remainder of the management area. Trailhead facilities at Camp Draw and a snowmobile trail between Wildhorse and Jarbidge will be constructed as funds become available.

Wildlife and Fish:

Habitat will be protected with emphasis on improvement of key habitat such as winter range, fawning, and brooding areas. Big game summer ranges will be considered when planning for other resources. Maintain or slightly increase aquatic

habitat productivity through direct habitat improvement, coordinated with management of other resources. Emphasis will be placed upon improving habitat for the Federally listed Lahontan cutthroat trout through coordinated management and cooperation with the U.S. Fish and Wildlife Service and NDOW through direct habitat improvements.

Range:

Livestock grazing will continue to be a major use of the area. Range improvements will be maintained, constructed, and reconstructed.

Timber:

Firewood production will continue to be the main use of timber resources on the area. Aspen, subalpine fir, and mahogany are utilized for this purpose. The timber resource will be enhanced through tree plantings where feasible.

Water and Soil:

Maintain water quality and soil productivity. Management activities of all resources must protect or enhance soil and water resources and comply with applicable laws and regulations. Soil and water projects will emphasize protection, disturbed area reclamation, emergency burn rehabilitation, and increasing water yield and soil productivity.

Lands:

Land exchanges, acquisitions, and rights-of-way, will be used to provide public access and block-up land for more efficient management. Research and special studies will be allowed.

It has been discussed and proposed that scattered, isolated parcels of BLM lands adjacent to this management area be transferred to the Forest Service to improve management efficiency. These parcels are located adjacent to National Forest System lands along the eastern edge of the Independence Range and the northeast corner of this area. If congressional legislation is enacted the areas will be managed as outlined in current management plans prepared by the BLM or as otherwise specified in the legislation.

Active special uses include outfitting and guiding, water and power transmission lines, roads, electronic sites and other temporary uses. Additional proposed uses that are needed, reasonable, environmentally appropriate, and within Forest Service policy will continue to be approved on a case-by-case basis.

Facilities: Forest Service administrative facilities will be constructed and maintained as needed. Old facilities possessing no historic value will be removed.

Protection: The extent of fire protection will be commensurate with the value of the resources being protected. Fire will be used as a management tool.

Minerals: Mineral exploration, leasing and development will continue within Forest Service surface use regulations in coordination with other resources. Emphasis is to encourage lawful minerals activities while protecting renewable surface resources.

Management Direction, Standards, and Guidelines for the Mountain City Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES	
			RECREATION	
Cultural Resource Planning, Inventory, Evaluation, Nomination, Protection	A01	Conduct thematic inventory and evaluation. Nominate and protect as appropriate. Prepare management plans. More fully inventory and evaluate known sensitive areas.	Identify and evaluate any historical structures at Forest Service facilities which may be related to the CCC era or early development of the Forest. Nominate and protect as appropriate.	
	A02		Inventory and evaluate known historical mining towns of Mardis, Charleston, and Gold Creek; as appropriate nominate to the National Register. Develop a plan to address management alternatives.	
	A03		If a project is planned that may impact them, known prehistoric sites in the vicinity of Wildhorse Reservoir will be properly evaluated and locations will be verified.	
	A04		Priorities for recreation construction/reconstruction:	
Facility and Site Construction and Reconstruction	A05	Bring the condition of developed recreation facilities to maintenance Class 1.	1. Jack Creek Campground	
	A06		2. Big Bend Water System	
Facility and Site Management	A07	Manage developed sites at standard service level during the managed recreation season.	Site	Capacity
			Big Bend	PAOT Days 10,370
ORV Management	A08	Develop a travel plan to control off-road vehicle use and provide protection for vegetation, soil, and other resources.	Wildhorse Crossing	32,120
			The following roads are closed from from January 1 to May 20 to prevent damage to the road surface:	
			1. Haystack-Waterlog Summit Road #10013	
			2. Sagehen Road #10015	
			3. California Creek Road #10016	
			4. Belcher Road #10034	
			5. Sunflower Road #10035	
			6. Penrod Creek-Point of Rocks Road #10226	

Management Direction, Standards, and Guidelines for the Mountain City Management Area

PRACTICES RECREATION (Cont.)	MCH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES	
ORV Management	A08		Close Camp Draw Trail #019 to all motorized vehicles. This trail provides access to the Jarbidge Wilderness.	
Helicopter Skiing		Allow helicopter skiing in approved areas.	Evaluate proposals for helicopter skiing on a case-by-case basis.	
Trail System Maintenance and Operation	A12	Provide a trail system adequate for administrators, permittees, and the public.	Maintain trails to Level 2.	
<u>TIMBER</u> Timber Harvest Administration	E07	Provide for personal use Christmas tree sales.		
<u>FACILITIES</u> Facility Maintenance	L25	Remove facilities no longer needed for Forest Administration.	Remove all buildings at Gold Creek Guard Station.	
			Remove the following buildings at the Mountain City Administrative Site:	
			1. Dwelling #1115	
			2. Garage #1365	
			3. Root cellar #1364	

RUBY MOUNTAINS MANAGEMENT AREA - 263,971 ACRES

Description

The Ruby Mountains Management Area lies approximately 30 miles east of Elko, Nevada. Extending from the Secret Pass Highway south 70 miles to Overland Pass, the area encompasses 245,411 acres of National Forest administered land and approximately 18,560 acres of private land. The lands situation is complicated by contiguous private land, which borders the area along 7 percent of its boundary. The management area surrounds, but does not include the Ruby Mountain Wilderness Management Area or the Soldier Lake Management Area which dominate the higher elevations.

The area's topography is generally characterized by steep slopes dissected by deep, narrow canyons.

Vegetation is diverse, varying from that associated with the sagebrush steppes to that characteristic of sub-alpine zones.

Lamoille Canyon, located 25 miles southeast of Elko, provides spectacular views of the surrounding rugged mountains and glaciated canyons. As a result of the canyon's scenic value and a paved highway, the canyon attracts many visitors each year. Three developed sites exist in the canyon. The Thomas Canyon Campground and the Power House Day Use Site both receive heavy pressure while the Terraces Day Use Site receives only a moderate degree of use. None of these developed sites have been maintained to the standard at which they were built.

Lamoille Canyon Scenic Area is used heavily for viewing by motorists and as a trailhead into the Ruby Mountains RARE II area. Because of the high standard highway in the canyon, the "Self-Guided Auto Tour" receives the bulk of this use while the trailhead at the end of the highway is heavily used, accounting for 60 percent of the use in the proposed wilderness.

Dispersed recreation use is concentrated in the vicinity of the Harrison Pass Road. Common activities include hunting, fishing, and collecting miscellaneous Forest products. The Ruby Mountains are recognized as a premier hunting area for both resident and non-resident hunters.

Grazing of domestic livestock is the most prominent single use occurring in the area. Cattle make extensive use of nearly all the canyons and flat areas. Sheep grazing occurs in the higher elevations. Total use represents approximately 30,000 AUM's. Where AMP's have been fully implemented, range condition is generally in an upward trend; while allotments without implemented management plans exhibit a downward trend. All allotment plans, about 33, have been prepared however, only approximately 75 percent of these are fully implemented at this time. There is one wild horse territory on the very south end of this unit with capacity for 40 to 50 head of horses. Periodic reductions in horse numbers are required.

Dry fuel wood exists in only limited amounts over the unit, while demand is high. Because of the steep terrain, aspen is available only in small isolated patches. There are several pinyon-juniper stands which are somewhat more accessible than the aspen but these are mostly green stands.

The Ruby Mountains are home to one of the largest mule deer herds in Nevada. Nearly all the unit provides suitable summer habitat with some of the low lying areas also serving as winter habitat. Those ranges identified by NDOW as having major winter significance are the East Ruby Bench, Green Mountain Bench, Thorpe-Secret Creek, and Corral-Pearl Creek.

Populations of sage grouse, chukar, blue grouse, and Hungarian partridge all exist throughout the unit. The lower elevations are primarily summer habitat for sage grouse, with only a limited number of strutting grounds and one key wintering site south of Shanty Town. The other species find year-long habitat in the range.

The area's fisheries support brook, rainbow, and the threatened Lahontan cutthroat trout.

There is one patented mining claim on Battle Creek and numerous nonpatented claims from this area south. Some oil and gas leases exist and there is a possibility for geothermal development. A moderate amount of exploration activity has been associated with the claims and leases.

A relatively large portion of the unit has alternating ownership of Federal and private land. Consolidation of ownership through an exchange process is being emphasized.

Two land exchange proposals are currently being evaluated.

On the south portion of the unit there is an adequate road transportation system. From Harrison Pass north access is limited. Efforts to acquire access are being tied to possible land exchanges. As opportunities arise other access will also be acquired.

The Ruby Crest Trail has been listed on the National Register. Adequate maintenance money has not been forthcoming the last two to three years. Efforts are concentrated in the head of Lamoille Canyon, and from Liberty Pass to Overland Lake. Only occasional work is done on the Overland trail, while others are being completely ignored. The trails need considerable work just from a safety standpoint. This neglect of the trail system coupled with the shortage of road access is making it increasingly difficult to administer much of the area.

During the 1970 decade, 32 fires were documented on this management area. Lightning strikes were responsible for 22 of these wildfires while 10 were man caused. The largest fires for this decade were recorded in 1979 and burned 1200, 5500, and 8230 acres. Dry, hot conditions were responsible for the high fire activity recorded for this management area. Historically large fires, greater than 1000 acres, have occurred on the southern portion of this management area on a regular basis. Under a cooperative agreement, the Nevada Department of Forestry handles initial attack on fires in this unit.

Considerable effort has been made in evaluating cultural resources in conjunction with the land exchange program on the north end of the unit. The rest of the unit has had only limited work associated with land disturbing activities. Nominations to the National Register can be expected.

This area is considered an extremely important watershed, as all of the streams originating on the area are used for irrigation on private land surrounding the mountain. It is expected that the off-site demands placed on these water sources will increase substantially in the future, thus increasing the chance of adverse impacts on Forest management needs such as livestock, wildlife, developed recreation and fisheries.

At the high elevations in the vicinity of Pearl Peak, which is being considered for Research Natural Area designation, there are stands of bristlecone pine which may have value for tree ring studies. Efforts are directed at protecting this area, including keeping it isolated from roads and other improvements.

Management Prescription

Recreation:

Maintain the developed sites to a standard that assures public use and safety. Special emphasis will be given to the Thomas Canyon Campground and the self-guided auto tour up Lamoille Canyon. Dispersed recreation efforts will focus on the Scenic Area in Lamoille Canyon and motorized use in Harrison Pass. Trail use for hunting, fishing, hiking and backpacking will receive special consideration. Development of needed trails and trailheads to serve the areas open to public access will continue.

Range:

Optimize production and utilization of forage available for livestock use, consistent with maintaining the environment, and providing for multiple use of the range. Cultural practices and structural improvements may be used to accomplish this task.

Wildlife:

Emphasize management practices on key mule deer winter areas which promote those habitat components for mule deer. Continue to identify areas of significant importance to the management indicator species. Continue to monitor and provide for improvement in fisheries habitat. Emphasize coordination between resources as a means for increasing habitat improvement. Emphasis will be placed upon improving habitat for the Federally listed Lahontan cutthroat trout through coordinated management, cooperation with NDOW and the U.S. Fish and Wildlife Service and through direct habitat

improvements. In addition, the Forest will cooperate with NDOW and the U.S. Fish and Wildlife Service in recovery efforts for the peregrine falcon in Ruby Valley.

Timber:

Provide for harvesting of available fuelwood and Christmas trees. Utilize greenwood cutting to improve wildlife habitat on an planned basis.

Minerals:

Encourage lawful mineral activities while protecting renewable surface resources and allowing other resource activities to occur.

Water:

Protect the quality and quantity of water produced on the area while providing for Forest management.

Lands:

Emphasize consolidation of ownership through the exchange process. Acquire needed public access where possible in conjunction with land exchanges. Allow for special uses such as utility corridors, electronic sites, outfitter-guides, skiing, summer homes, and organizational camp.

It has been discussed and proposed that scattered isolated parcels of BLM lands adjacent to this management area be transferred to the Forest Service to improve management efficiency. These parcels are located adjacent to National Forest System lands along the eastern and western edges of this area. If congressional legislation is enacted the areas will be managed as outlined in current management plans prepared by the BLM or as otherwise specified in the legislation.

A Research Natural Area is recommended on Pearl Peak; an Establishment Record will be prepared and submitted to the Regional Forester.

Facilities:

Maintain and construct needed roads, trails and trailheads in coordination with other resource activities. Provide for needed administrative facilities at selected administrative sites.

Management Direction, Standards, and Guidelines for the Ruby Mountain Management Area

MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES												
RECREATION MTB CODE MANAGEMENT DIRECTION STANDARDS AND GUIDELINES													
RECREATION Cultural Resource Inventory, Evaluation, Nomination, Protection A01 A02 A03 A04	Recorded sites along Ruby Lake between Indian Creek and Camp Ruby will be located and properly evaluated.												
Facility and Site Construction and Reconstruction A05 A06	Priorities for work: 1. Thomas Creek facilities 2. Self-guided auto tour displays 3. Trails and facilities 4. Terraces facilities 5. Power House facilities												
Facility and Site Management A07	<table border="0"> <tr> <td><u>Site</u></td><td><u>Capacity</u></td></tr> <tr> <td><u>PAOT Days</u></td><td></td></tr> <tr> <td>1. Thomas Creek</td><td>29,480</td></tr> <tr> <td>2. Trails end</td><td>40,500</td></tr> <tr> <td>3. Terraces</td><td>7,320</td></tr> <tr> <td>4. Power House</td><td>6,700</td></tr> </table> Complete two developed site vegetative management plans by the year 1990.	<u>Site</u>	<u>Capacity</u>	<u>PAOT Days</u>		1. Thomas Creek	29,480	2. Trails end	40,500	3. Terraces	7,320	4. Power House	6,700
<u>Site</u>	<u>Capacity</u>												
<u>PAOT Days</u>													
1. Thomas Creek	29,480												
2. Trails end	40,500												
3. Terraces	7,320												
4. Power House	6,700												
Off-Road Vehicle Management A08	Close the Soldier Creek Road #10335 from from November 15 to May 1 to prevent damage to the road surface. Prohibit the use of motorized vehicles (other than over-snow) in the upper Thompson Creek area.												

Management Direction, Standards, and Guidelines for the Ruby Mountain Management Area

MANAGEMENT PRACTICES	MANAGEMENT CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RECREATION (Cont.) Helicopter Use		Prohibit landing of aircraft, or dropping or picking up any materials, supplies, or person by means of an aircraft, including a helicopter except by permit in designated areas.	
Winter Use		Provide for both cross-country skiing and snowmobile use in Lamaille Canyon while managing to limit conflicts between these uses.	
Outfitter-guides		Limit summer and fall outfitter and guide permits to those existing unless a public need can be shown.	
Trail System Maintenance and Operation	A12	Provide a trail system adequate for administrators, permittees, and the public.	Maintain trails to Level 3.
Wildlife & Fish Wildlife Habitat Improvement	C02 C03	Emphasize improvement of big game winter range.	Improve big game winter range each year by controlling juniper and pinyon in selected sites.
		Emphasize riparian management	Construct an average of three wildlife structure each year.
		Provide habitat for sensitive and Federally listed T&E species.	Cooperate with NDOW and the U.S. Fish and Wildlife Service in recovery of the peregrine falcon in Ruby Valley.
RANGE Range Administration and Management	D07	Manage wild horses in accordance with approved Cherry Spring Wild Horse territory plan.	Coordinate wild horse population control with BLM and state agencies.

Management Direction, Standards, and Guidelines for the Ruby Mountain Management Area

<u>PRACTICES</u>	<u>MIR CODE</u>	<u>MANAGEMENT DIRECTION</u>	<u>STANDARDS AND GUIDELINES</u>
<u>Timber</u>			
Timber Stand Improvement	E05 E06	Use K-V funds to manage Christmas trees for improved form.	
Timber Harvest Administration	E07	Maintain traditional pinenut gathering areas. Prepare and offer pinenut sales.	
Bristlecone Pine Management		Protect ancient bristlecone pine.	Protect bristlecone pine, including remnants, from destruction or removal by unauthorized persons. Authorize the disturbance of bristlecone pine sites only with written permission of the Forest Supervisor.
			Continue scientific research but don't allow the cutting of live or dead bristlecone pine without written approval of the Forest Supervisor.
<u>SOIL & WATER</u>			
Rights/Use	F07	Participate in all water rights adjudications involving National Forest administered lands.	Participate in the Ruby Valley adjudication process.
<u>LANDS</u>			
ROW Acquisition	J18	Work to acquire road and trail rights-of-way shown in the Forest Action schedule and as possible with the land exchange program.	Acquire one easement between Harrison Pass and Lamolille. Acquire one easement between Lamolille and Soldier Creek. Acquire one easement between Soldier Creek and Secret Pass.

Management Direction, Standards, and Guidelines for the Ruby Mountain Management Areas

PRACTICES LANDS (CONT.)	MTH		STANDARDS AND GUIDELINES
	CODE	MANAGEMENT DIRECTION	
Research Natural Areas		Protect the Pearl Peak Research Natural Area from disturbance while it is being considered for designation and following designation.	
		Return the proposed Pearl Peak Research Natural Area (RNA) to Multiple Use Management if it is not designated as a RNA.	
PROTECTION Fire Prevention	P02	Develop a fire prevention program directed toward reducing the number of wildfires.	Inspect recreation residences for fire safety.
	P04 P05 P06 P07 P08	Make an appropriate suppression response on all wildfires. Provide a level of protection that is appropriate to the value of the resource, management direction, and threat to off-site developments and public safety.	Fire suppression methods in Lamolle Canyon will generally be limited to hand tools.
Fire Suppression		Forest fire support will be maintained to meet suppression objectives.	

RUBY MOUNTAINS RECOMMENDED WILDERNESS AREA - 55,600 ACRES

Description

The Ruby Mountains Recommended Wilderness Management Area, extending from the head of Lamoille Canyon almost to Harrison Pass, dominates the high elevations of the Ruby Mountains. The area is characterized by rugged topography and alpine scenic values.

Although dispersed recreation use is only moderate to light over the area, the many pristine lakes and the remote wilderness character of the area make it a popular destination for hikers, backpackers, and fishermen. The majority of people enter at Lamoille Canyon and explore the length of the unit via the high standard Ruby Crest Trail.

Important habitat for blue grouse occurs over the entire area. There is a resident herd of mountain goats which were introduced in the 1960's. Mule deer make use of the area in summer. There is little winter use made by wildlife other than the goats, due to the prohibitive cold and snow depth.

Grazing by domestic livestock is of secondary importance on this area. The rugged terrain and, to a lesser degree, lack of access to the Forest below the unit, precludes it from ever being critical to the livestock industry. Portions of the areas are now closed to grazing, while some sheep allotments are vacant, and others are in a nonuse status.

The small amount of private land in the unit is located on very steep and rocky terrain. It is very questionable that it could ever be developed for use other than just viewing. This land is currently being evaluated for acquisition in a land exchange action.

There is a little mineralization known to occur in the unit and there are no existing operating plans.

The Ruby Crest Trail has been listed on the National Register. Maintenance is concentrated in the head of Lamoille Canyon and Liberty Pass to Overland Lake. Only occasional work is done on the Overland trail and others are being completely ignored.

Between 1970 and 1980, there was one recorded man-caused wildfire for this management area. This fire was less than one acre in size. There are records of numerous small wildfires occurring on a regular basis since the early 1930's.

Protection is not a problem as the rocky terrain limits the possibilities for any but small localized fires.

The upper part of Seitz Canyon is being considered for Research Natural Area designation.

Management Prescription

- Wilderness:** This area will be managed to preserve its wilderness characteristics pending a designation by Congress. The ecosystems will be allowed to function without man-caused interference, except for fire control.
- Recreation:** Manage recreation activities to be compatible with the wilderness resource. Work with wilderness users through permits, trail development, and outfitter permits to avoid overuse of the more popular areas.
- Range:** Manage livestock use to be compatible with the wilderness resource. Livestock numbers on existing allotments will be managed within grazing capacities to avoid detracting from wilderness values.
- Minerals:** Manage minerals and energy development activities to protect the wilderness resource.
- Lands:** Try to acquire the private land in the unit through a land exchange program.
- A Research Natural Area is recommended in Seitz Canyon; an Establishment Record will be prepared and submitted to the Regional Forester.
- Protection:** Allow fire to express its natural role in the ecosystem.
- Wildlife and Fish:** Maintain wildlife and fish habitat in coordination with other uses.

Management Direction, Standards and Guidelines for Ruby Mountains Recommended Wilderness Management Area

PRACTICES	MDH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>RECREATION</u>			
Cultural Resource	A01	Inventory potentially sensitive areas	Conduct systematic sample inventory of high altitude area between Lamolle Canyon and Harrison Pass.
Inventory and	A02	and evaluate sites. Nominate and	
Evaluation,	A03	protect as appropriate.	
Nomination, Protection	A04		
Outfitter-Guides	A08	Limit summer and fall outfitter and guide permits to those existing unless a demonstrated need can be shown to issue new permits.	
<u>WILDERNESS</u>			
<u>Wilderness Use Administration</u>	B03	Eliminate uses conflicting with wilderness values.	Continue closure to domestic livestock grazing except for recreational stock use around high mountain lakes: Echo, Favre, Liberty, Castle, Furlong and Overland
<u>SOIL & WATER</u>			
<u>Rights/Use Management</u>	F07	Participate in all water rights adjudications involving National Forest administered lands.	Participate in the Ruby Valley adjudication.
<u>LANDS</u>			
Land Exchange	J13	Make efforts to acquire private land within management area.	Efforts to acquire private land will be directed towards exchanging private lands for federal lands outside of management area.
Research Natural Areas		Protect the proposed Seitz Canyon Research Natural Area from disturbances while it is being considered for designation and following designation. Return the proposed Seitz Canyon Research Natural Area (RNA) to multiple use management if it is not designated as a RNA.	

EAST HUMBOLDT MANAGEMENT AREA - 62,292 ACRES

Description

The East Humboldt Management Area is located on the extreme north end of the Ruby Mountains. Extending from Wells, Nevada south to the Secret Pass Highway, the area encompasses approximately 62,292 acres of National Forest land and approximately 33,600 acres of private land held within Forest boundaries. The lands situation is further complicated by contiguous private land which borders the area along approximately 80 percent of its boundary.

Elevations range from 5700 feet at the base of the mountain to over 11,000 feet at Hole-in-the Mountain Peak. The area's topography is characterized by steep slopes, deeply dissected by narrow canyons.

Developed recreation sites exist at Angel Lake and Angel Creek. These sites have a high standard surfaced road leading to them as well as surfaced roads and pads in the sties. The water systems were brought to state standards in 1984 and are in good operating condition. Fees are being charged at both sites. Use intensity is currently at a moderate level. Because of a shortage of funds over the last several years neither site has been maintained to the standard at which they were built. This however, has not detracted from the sites' appearance as they are still fully functional.

The trail system over the management area was largely abandoned until 1984 because of no funds to maintain it. Many of the trails are nearly impassable. In 1983 a public access for foot and horse use was acquired from Secret Pass into the Stevens Creek area. Considerable effort has since been put into bringing this trail and the lower trail connecting the Boulder Creeks to a fully functional level. Additionally the Winchell Lake and Gray's Lake trails have been maintained to high levels. At present levels of financing it is questionable that the rest of the trail system in this area can be maintained. With the use of the Nevada State Honors Camps it may be possible to bring the whole trail system to a highly maintained level over a period of several years. Evaluation of the use of the Honors Camp for this purpose is still going on.

Private sector developers identified the Ackler Creek drainage as having potential for a ski resort. An evaluation by the Forest Service of the potential for a ski resort found it to be fair. Additional evaluations by the Forest Service have been made to determine which areas would be needed for lifts and how a land exchange could fit reasonably into potential for ski development.

Because of the private land ownership pattern along the Forest boundary, public access is extremely limited. This lack of access makes administration difficult and holds dispersed recreation to a minimal level. Common activities include hunting, fishing, and sightseeing and are focused on the high standard Angel Lake Road, Weeks Access, and the Horse Creek Road.

Although efforts to acquire additional public access have generally been tied to the land exchange program, gaining additional public access will also be pursued by other means. It is expected that road building over acquired rights-of-way will occur slowly due to limited funding.

Grazing of domestic livestock is the most prominent single use occurring in the management area. Due to the steep, rugged nature of the topography a large portion of the area is unsuitable for livestock grazing. As a result the bulk of the forage is taken from the lower benches and canyon bottoms. AMP's have been completed for all allotments in the area but only implemented on approximately 75 percent. The remaining 25 percent will be implemented as funding becomes available. Generally, those allotments that are under management exhibit upward trend while those without implemented AMP's exhibit a downward trend.

The East Humboldt Management Area provides high quality summer deer habitat. Generally, mule deer do not winter on the East Humboldt as a result of the deep snow pack prevalent in the area. Because of the importance of this area for deer as a summer range, all AMP's address wildlife needs in depth.

Populations of sage grouse, chukar, blue grouse, and Hungarian partridge exist throughout the area. Several livestock exclosures have been built and more are planned in key riparian areas. These exclosures range in size from one to five acres. Hunting pressure is limited due to the restricted public access.

Mountain goats were introduced into the area in 1981. They appear to have adapted to the site, and there is additional opportunity for further introductions of mountain goats into the East Humboldts.

The approximately 33,600 acres of private land in the management area are in an alternating federal-private ownership pattern. This extends the influence of the private land over an area twice the 33,600 acres. Consolidation of ownership is being actively pursued through an exchange program. Currently three exchanges are under evaluation.

If the needed land exchanges could be completed and federally owned land could be consolidated, it would help solve many of the current management problems. Some of these problems are restricted access, ambiguous ownership boundaries, and the potential for poor management in inheld lands over which the Forest Service has no control.

Between 1970 and 1980 five wildfires were recorded on the management area, all lightning caused. The majority of all fires recorded since 1920 were under one acre with the largest burning 15 acres in 1974. Under a cooperative agreement, the Nevada Department of Forestry handles all initial attack on fires in this management area.

Generally the area is not heavily mineralized, however numerous claims do exist on the south end. Exploration efforts have been at low levels for several years and are not anticipated to increase in the near future.

Fuelwood, primarily green pinyon-juniper and dead and down aspen exists only in limited amounts on the area. Any harvesting of green materials for fuelwood is done under a prescribed plan. The plan addressed wildlife, livestock, and fire management needs. It is expected that even if additional public access is acquired, the amounts of fuelwood harvested would not increase appreciably.

Considerable efforts have been made in evaluating cultural resources in the area, primarily in conjunction with the land exchange program. More detailed studies are needed to evaluate the total prehistoric complex. As a rule the area has been evaluated for retention of its scenic qualities. The scenic qualities would be considered high because of the area's diversity and pristine nature.

This area is considered an extremely important watershed, as all of the streams originating here are used for irrigation on private land surrounding the mountain. The quality of the water is considered high because it is relatively free of man made pollution. It is expected that the off-site demands for water will increase substantially in the future. These demands can be expected largely in a desire to convey the water off the Forest in some type of pipeline. A demand for both hydro-electric and irrigation systems may exist. This type of development if approved, will increase adverse impacts on other forest management needs, such as wildlife, fisheries, livestock, and developed recreation. The problems would arise mainly from removing water from existing streams.

Management Prescription

Recreation: Maintain the developed recreation sites to a standard that will assure continued public use and safety.

Develop and maintain a trail system designed to facilitate dispersed recreational activities such as hunting, fishing, hiking, and backpacking. Emphasize development of those trails needed to serve the areas not presently accessible due to lack of public access. Maintain those portions of the trail system in areas which will remain under Federal control.

Range: Optimize production and utilization of forage available for livestock use consistent with maintaining the environment and providing for multiple use of the rangeland resource. Cultural practices and structural improvements may be used to accomplish this task.

Wildlife: Emphasize management practices on mule deer areas and promote those habitat components that are critical for mule deer. Continue to identify areas important to the management of other indicator species. Develop a program for fisheries habitat improvement with emphasis on Lahontan cutthroat trout fisheries. Emphasize resource coordination as a means of obtaining habitat improvement. Emphasis will be placed upon improving habitat for the Federally listed Lahontan cutthroat trout through coordinated management, cooperation with NDOW and the U.S. Fish and Wildlife Service, and through direct habitat improvement.

Timber: Provide for public harvesting of fuelwood and Christmas trees where possible. Utilize greenwood cutting to improve wildlife habitat on a planned basis.

Minerals: Encourage lawful mineral activities while protecting renewable surface resources and allowing other resource activities to occur.

Soil and Water: Protect the quality and quantity of water produced on the area and provide water for Forest management needs.

Lands: Emphasize consolidation of ownership through the exchange process. Acquire needed public access where possible, in conjunction with land exchanges or by other means. Administer special uses, such as utility corridors and private recreation developments, in a manner consistent with the relatively undeveloped nature of the higher elevations.

It has been discussed and proposed that scattered isolated parcels of BLM lands adjacent to this management area be transferred to the Forest Service to improve management efficiency. These parcels are located adjacent to National Forest System lands along the northern and western edges of this area. If congressional legislation is enacted, the areas will be managed as outlined in current management plans prepared by the BLM or as otherwise specified in the legislation.

Facilities: Coordinate road and trail maintenance and construction with other resource activities. Maintain present facilities and restrict any new buildings to present administrative sites.

PRACTICE		MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES								
RECREATION											
Cultural Resource Planning, Inventory, Evaluation/ Nomination, Protection/ Enhancement	A01 A02 A03 A04	Conduct inventory, evaluation of known sensitive areas. Nominate and protect as appropriate. Develop plans to address management alternatives.	Prehistoric hunting complexes in area of Greys Peak are priorities.								
Facility and Site Construction and Reconstruction	A05	Bring the condition of developed recreation facilities to maintenance class 1 by 1996.	Priority for facility maintenance: 1. Angel Lake Facilities 2. Angel Creek Facilities								
Facility and Site Management	A07	Manage developed sites at full service level during snow-free and frost-free periods.	<table><tr><td>Site</td><td>Capacity</td></tr><tr><td>Angel Lake</td><td>PAOT Days</td></tr><tr><td>Angel Creek</td><td>22,140</td></tr><tr><td></td><td>16,080</td></tr></table>	Site	Capacity	Angel Lake	PAOT Days	Angel Creek	22,140		16,080
Site	Capacity										
Angel Lake	PAOT Days										
Angel Creek	22,140										
	16,080										
Off-road Vehicle Management	A08	Develop and implement developed site prescriptions to achieve and maintain desirable vegetative cover.	Complete two developed site vegetative management plans by 1990.								
Helicopter Use		Maintain travel plan to control off-road vehicle use and provide protection for vegetation, soil, and other resources.	Close Secret-Starr Trail #025 to all motorized vehicles.								
Outfitter-Guides		Prohibit landing of aircraft, or dropping or picking up any materials, supplies, or person by means of an aircraft, including a helicopter except by permit.									
		Limit summer and fall outfitter and guide permits to those existing unless a demonstrated need can be shown to issue new permits.									
WILDLIFE & FISH Wildlife Habitat	C01	Emphasize improvement of big game winter Range.	Improve big game winter range each year by controlling juniper and piñon on selected sites.								

Management Direction, Standards, and Guidelines for the East Humboldt Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES	
			WILDLIFE & FISH	WILDLIFE HABITAT
WILDLIFE & FISH	C01	Emphasize riparian area management	Construct an average of one wildlife structure each year.	
TIMBER	E05	Use K-V funds to manage Christmas trees		
Timber Stand Improvement	E06	for improved form.		
Timber Harvest Administration	E07	Maintain traditional pinenut gathering areas.		
		Prepare and offer pinenut sales.		
SOIL & WATER	F07	Participate in all water rights adjudications involving National Forest administered lands.	Participate in the Clover Valley and Ruby Valley adjudications.	
Rights/Use Management				
LANDS	J01	Utility corridors will be limited to those identified.	Approved corridors are:	
Special Use Permits			1. Outhouse draw area. 2. Welcome area.	
ROW Acquisition	J18	Work to acquire road and trail rights-of-way shown in the Forest Action Schedule and as possible with the land exchange program.	Acquire two easements on west side of area between Secret Pass and Welcome. Acquire one easement on the east side of the area between the Weeks access road and Agee Spring.	
Fire Suppression	P04	Make an appropriate suppression response on all wildfires.	Fire suppression methods will generally be limited to use of hand tools.	
	P05			
	P06			
	P07	Provide a level of protection that is appropriate to the value of the resource, management direction, and threat to off-site developments and public safety.		
	P08			
		Forest fire support will be maintained to meet suppression objectives.		

EAST HUMBOLDT RECOMMENDED WILDERNESS AREA - 18,509 ACRES

DESCRIPTION

The East Humboldt Recommended Wilderness Management Area is centered around the Boulder Creeks and includes outstanding features such as Hole-in-the-Mountain Peak and Steele Lake. High and steep topography, with many dissecting canyons are characteristic of this area. Some small meadows are found in the heads of U-shaped canyons, with a few small lakes formed by old glacial dikes. Many sheer cliffs and steep talus slopes dominate the higher U-shaped valleys and slopes with rocky shallow soils covering the V-shaped lower elevations. Rocks in the area are highly metamorphosed. Large amounts of rock tend to make the area low in erosive nature, but streamflows peak rapidly as the snow melts then fluctuate rapidly according to amounts of precipitation from summer storms.

A nearly complete lack of public access has prevented much recreation use in this area in the past. In 1982 a trail access for foot and horse traffic was acquired into the south end near Stephens Creek. This trail has been maintained and signed. No other public access exists at present. Additional access will be available if a pending land exchange is completed.

Grazing of domestic livestock is the most prominent single use occurring in the management area. Due to the steep rugged nature of the topography a large portion of the area is unsuitable for livestock grazing.

The East Humboldt Recommended Wilderness Management Area provides suitable summer habitat for a substantial portion of the Ruby Mountain mule deer herd; however, winter range is scarce. Populations of sage grouse, chukar, blue grouse, and Hungarian partridge exist throughout the area. Hunting pressure on all species is limited due to restricted public access. Mountain goats were introduced into the area in 1981 and are adapting well to the site.

A partial trail system now exists, and additional work could be done to make travel through the area possible without undue difficulty.

Potential for the occurrence and development of economic mineral deposits is low.

The watershed value of the area is high, with very little erosion occurring that is not natural. No need exists for watershed improvement. There are no commercial stands of timber, but some aspen is present. Steep terrain and the lack of roads make utilization of the aspen unlikely, even for firewood, for several decades.

Considerable efforts have been made in evaluating cultural resources in the area, primarily in conjunction with the land exchange program. More detailed study is needed to evaluate the prehistoric hunting complex present in this area.

Management Prescription

Wilderness	This area will be managed to preserve its wilderness characteristics pending a designation by Congress. The ecosystems will be allowed to function without man-caused interference, except for fire control.
Recreation:	Manage recreation activities to be compatible with the wilderness resource. Work with wilderness users through permits, trail development, and outfitter permits to avoid overuse of the more popular areas.
Range:	Manage livestock use to be compatible with the wilderness resource. Livestock numbers on existing allotments will be managed within grazing capacities to avoid detracting from wilderness values.
Minerals:	Manage minerals and energy development activities to protect the wilderness resource.
Lands:	Attempt to acquire the private land in the unit through a land exchange program.
Protection:	Allow fire to express its natural role in the ecosystem.
Wildlife and Fish:	Maintain wildlife and fish habitat in coordination with other uses.

Management Direction, Standards, and Guidelines for the East Humboldt Recommended Wilderness Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>RECREATION</u>			
Outfitter-Guides	A08	Limit Summer and fall outfitter and guide permits to those existing unless a demonstrated need can be shown to issue new permits.	
<u>WILDERNESS</u>			
Wilderness Use Administration	B03	Eliminate uses conflicting with wilderness values.	
<u>SOIL & WATER</u>			
Rights/Use	F07	Participate in all water rights adjudications involving National Forest administered lands.	Participate in the Clover Valley adjudication.
<u>LANDS</u>			
Land Exchange	J13	Make efforts to acquire private land within management area.	Efforts to acquire private land will be directed towards exchanging private lands for federal lands outside of management area.

SOLDIER LAKES RECOMMENDED WILDERNESS AREA - 12,314 ACRES

DESCRIPTION

The Soldier Lakes Recommended Wilderness Management Area primarily encompasses an area known as the Soldier Basin. The basin is characterized by rugged topography, numerous mountain lakes, and alpine scenic values.

Although dispersed recreation use is only moderate to light over the area, the pristine lakes and remote wilderness character of the area make it a popular destination for hikers, backpackers, and fishermen. The area is accessible by two trails from either the east or west side of the mountain. Both trails are high standard and regularly maintained. A third trail exists, which originates in Withington Basin. The trail is rarely used by recreationists. The only maintenance completed in recent years has been by permittees to facilitate livestock movement.

Important habitat for blue grouse occurs over the entire area. Mule deer make use of the area in summer. There is little winter use made by wildlife due to the prohibitive cold and snow depth.

The area is grazed by both cattle and sheep during the summer months. The rugged terrain limits use over most of the area causing livestock to concentrate around Soldier and Robinson Lakes. A serious problem exists with livestock overuse. The Allotment Management Plan is not being followed.

A small amount of private land in the unit is located on steep and rocky terrain. It is unlikely that this land could ever be developed for use other than scenic viewing. This land is currently being evaluated for acquisition in a land exchange action.

Limited mineralization is known to occur in the unit and there are no existing operating plans.

Between 1970 and 1980, one man-caused wildfire was recorded in this management area. This fire was less than one acre in size.

Protection is not a problem as the rocky terrain limits the likelihood of any but small localized fires.

Management Prescription

Wilderness:

This area will be managed to preserve its wilderness characteristics, pending a designation by Congress. The ecosystems will be allowed to function without man-caused interference, except for fire control.

Recreation:

Manage recreation activities to be compatible with the wilderness resource. Work with wilderness users through permits, trail development, and outfitter permits to avoid overuse of the more popular areas.

Range: Prepare and implement a Management Plan that will address the livestock grazing problems irrespective of wilderness values. Bring livestock numbers in line with the available forage resource. Assure that any range improvements are compatible with wilderness values.

Minerals: Manage minerals and energy development activities to protect the wilderness resource.

Lands: Attempt to acquire the private land in the unit through a land exchange program.

Protection: Allow fire to express its natural role in the ecosystem.

Wildlife and Fish: Maintain wildlife and fish habitat in coordination with other uses.

Management Direction, Standards, and Guidelines for the Solider Lake Recommended Wilderness Management Area

MH		MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>RECREATION</u>			
Cultural Resource Planning, Inventory, Evaluation, Nomination, Protection	A01	Inventory potentially sensitive areas and evaluate sites. Nominate and protect as appropriate.	Conduct systematic sample inventory of high altitude areas in Boulder Creeks and Lizzie Basin.
	A02		
	A03		
	A04		
Outfitter-Guides	A08	Limit summer and fall outfitter and guide permits to those existing unless a demonstrated need can be shown to issue new permits.	
<u>WILDERNESS</u>			
Wilderness Use Administration	B03	Eliminate uses conflicting with wilderness values.	
<u>SOIL & WATER</u>			
Rights/Use Management	F07	Participate in all water rights adjudications involving National Forest administered lands.	Participate in the Ruby Valley adjudication.
<u>LANDS</u>			
Land Exchange	J13	Make efforts to acquire private land within management area.	Efforts to acquire private land will be directed towards exchanging private lands for federal lands outside of management areas.

JARBIDGE MANAGEMENT AREA - 175,960 ACRES

Description

The Jarbidge Management Area is used primarily for grazing of livestock and wildlife and the production of high quality water. This area produces high quality forage for 9,000 cattle and 11,000 sheep for 3 1/2 months during the summer. All allotments are under management plans and the majority are grazed under rest-rotation systems that have improved the condition of the forage and soil. Three of the cattle allotments have had increases in numbers over the past 10 years and several other allotments have potential for increases. This area has been grazed by livestock for over 100 years and the area was grazed very heavily in the early 1900's which reduced the condition of the vegetation and the soil. Comparisons with old photographs from around 1919, combined with long-term trend studies installed in the 1950's, show a marked improvement in the quality of the vegetation and soil.

The majority of the water from the district flows into the Columbia River drainage with a small amount flowing into the Great Basin. This water is important to farming areas many miles from the Forest in Idaho and Nevada. The precipitation varies from 15 to 25 inches annually and it is estimated that 400,000 acre-feet of water flows from the district each year. The small town of Jarbidge utilizes water from the Bear Creek drainage for their domestic water. The water is diverted from the stream directly into a storage tank and the water supply system. There is sediment in the streams during early spring runoff that comes from areas of natural geological erosion, beaver activity, grazing, roads, trails and mining activity. There is also some sedimentation during high intensity summer rain storms.

The only timber on the district consists of subalpine fir, limber pine and aspen. There have been no commercial saw timber sales on the district since the mining era. The only timber removed has been for Christmas trees, poles, posts, ornamental trees, and firewood. The demand for firewood and Christmas trees increases each year.

The old mining town of Jarbidge attracts many people each summer and four families make it their residence the year round. Recreation users come from all parts of the United States, but the majority of the visitors are from Nevada, Idaho, and California.

Recreation use is increasing, but primitive roads discourage recreation visitors. There are four developed recreation sites and several small undeveloped sites scattered over the district which are used mainly by deer hunters in the fall of the year. The Pole Creek area is a very good snowmobile area, but this activity is not increasing rapidly because of a lack of all-season roads and distance from population centers. The flat, bench-like terrain is excellent for snowmobiling with elevations up to 9,000 feet and snow depths of 4 to 8 feet each winter. There are approximately 28,000 acres adjacent to the existing Jarbidge Wilderness that have been proposed as wilderness.

This area provides excellent habitat for wildlife. Mule deer, antelope, sage grouse, blue grouse, chukar, Hungarian partridge, mourning doves, and cottontail rabbits provide good hunting throughout the district. Most of the streams on the district have small native rainbow trout and provide good fishing. In 1981 twelve California bighorn sheep were planted in the Jarbidge Wilderness near the confluence of Slide Creek and the East Fork. The mule deer hunting has been excellent on the Jarbidge district. The large area of back country in and adjacent to the Jarbidge Wilderness provides excellent summer range for mule deer. Deer numbers reached a high in the 1950's and 1960's and then decreased in the 1970's because of extreme winter weather, predators, forage, and hunting pressure. There is limited mule deer winter range on the district, but there are areas used early in the spring for fawning and rearing young. In the fall of the year many hunters come to the Jarbidge area in search of a large buck. These hunters come from all areas of Nevada with the majority coming from Las Vegas. Many out-of-state hunters come to the Jarbidge area from California. The same hunters seem to come back year after year. There are approximately 200 head of antelope that summer on the district each year. These antelope winter in Idaho and Nevada. There has been a hunting season since 1960 except for 1965, 1966, and 1967. The harvest has averaged 12 animals per year. The antelope habitat is in good condition and prescribed burning practices appear to be improving the forage.

There are eleven special-use permits on the Jarbidge district and six permits with other agencies covered under Memorandum of Understanding. There is not a big demand for special-use permits.

There are 244 miles of inventoried Forest roads on the district and 76 miles adjacent to the Forest that are needed for access. At the present time there is a need to upgrade roads on the district to prevent further deterioration and damage to other resources. The roads are becoming rougher and more difficult to travel each year because of the loss of surface material from erosion (wind and water). Many roads are becoming ditches and there is inadequate maintenance funds to drain water off the roads.

Mineral exploration near the town of Jarbidge has been increasing the last few years because of the history of gold in the area. Three mining companies have opened old roads, drilled test holes and excavated to sample the minerals. Other areas that have had mining activity are White Elephant, Camp Creek and Draw Creek. The White Elephant area has deposits of tungsten, molybdenum and copper. The ore was processed in a mill in O'Neil Creek below the mine. This mill has had little use since 1973. There are deposits of barite in Draw Creek and Camp Creek. The main deposit in Camp Creek is east of the Jarbidge Wilderness boundary and well within the recommended wilderness area. Mining this deposit will require building a very costly road and will be an impact on Camp Creek and the recommended wilderness. There is an increasing interest in leasable material for building stone on the district. Some of the areas of interest are White Elephant and the divide between Slide Creek and Canyon Creek. There are hot springs near the south end of the private land in Robinson Hole.

During the decade 1970 there were seven wildfires recorded for this Management Area. Four of these wildfires were lightning caused and three were person-caused. The largest fire occurred in 1972 and burned 1,550 acres. Another fire in 1978 burned 1,484 acres. Below average

precipitation, especially between the months of January to May, was recorded during 1972. Extremely low snowfall was recorded that winter, about 50 percent of normal. The highest temperature on record, for Elko (107 F), was recorded in August of 1978. Warmer than average monthly temperatures were recorded throughout the year. These conditions followed an extremely dry 1977; consequently, conditions were present for numerous fires and large fire size.

In 1972 a sagebrush prescribed burning program was started on the district and by 1979 over 5,000 acres of big sagebrush has been burned. This burning has reduced the volume of fuel, created fire-breaks and reduced the chances of large, hot fires. Prescribed burning of sagebrush should be continued in selected locations. The town of Jarbidge, which is located within the Forest boundary, is in a hazardous location if a fire should start below the town. The fuel in and around the town is heavy and a fire would spread rapidly through town. There is a volunteer fire department in Jarbidge with a limited amount of fire equipment. The rest-rotation systems on livestock allotments provide for a buildup of fuels in one-third to one-fourth of the allotments each year.

There are three administrative sites on the district - Pole Creek, Mahoney and Wildcat. The Pole Creek site is well located for administration of the majority of the district, but there is a need for additional housing and power. The Mahoney administrative site is quite old and many of the facilities are deteriorating. Wildcat is a one-room cabin, but is needed because of travel distances to this part of the district.

Jack Creek Crater is being recommended for designation as a Research Natural Area.

Management Prescription

- Recreation:** Existing developed sites will be improved and maintained in Jarbidge Canyon. Dispersed recreation will be emphasized on the remainder of the district. Trailhead facilities will be constructed as funds become available.
- Wildlife and Fish:** Habitat will be protected with emphasis on improvement of key habitat such as fawning and brooding areas. Big game summer ranges will be considered when planning for other resources.
- Range:** Livestock grazing will continue to be a major use of the area. Range improvements will be maintained, constructed, and reconstructed.
- Timber:** The area will continue to produce firewood. Aspen and subalpine fir will be utilized for firewood.

Water and Soil: Maintain water quality and soil productivity. Management activities of all resources must protect or enhance soil and water resources and comply with applicable laws and regulations. Soil and water projects will emphasize protection, disturbed area reclamation, emergency burn rehabilitation, and increasing water yield and soil productivity.

Lands: Land exchanges, acquisitions, and rights-of-way will be used to provide public access and block up land for more efficient management. Research and special studies will be allowed. A Research Natural Area in the Jack Creek Crater is proposed; an Establishment Record will be prepared and submitted to the Regional Forester.

It has been discussed that scattered, isolated parcels of BLM lands adjacent to this management area should be transferred to the Forest Service to improve management efficiency. These parcels are located adjacent to National Forest system lands along the northern boundary of this area. If congressional legislation is enacted, the areas will be managed as outlined in current management plans prepared by the BLM or as otherwise specified in the legislation.

Hydro-electric power development, water, and power transmission lines and other special use facilities will be allowed.

Facilities: Forest Service administrative facilities will be constructed and maintained as needed. Old facilities possessing no historic value will be removed or destroyed.

Protection: The extent of fire protection will be commensurate with the value of the resources being protected.

Minerals: Coordinate mineral exploration, leasing, and development with other resources. Focus on preserving the recreational, visual, and watershed resources.

PRACTICES	MIH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RECREATION			
Cultural	A01	Evaluate known potentially eligible sites. Nominate and protect/enhance as appropriate. Develop plan for management alternatives.	Complete nomination and rehabilitation of Mahoney Cabin and Station. Develop management plan.
Resource Planning	A02		Sites in vicinity of Pole Creek will be properly evaluated and locations verified.
Evaluation, Nomination, Protection, Enhancement	A03		
	A04		
ROS Management	A02	Maintain the amount of ROS semi-primitive non-motorized area.	Allow no permanent roads except for mineral production.
Facility and Site Construction	A06	Expand picnic opportunities in proportion to the current ratio of picnic PAOTS (2.72:1.00).	Priorities for reconstruction funds: 1. Family facilities. 2. Group facilities
Outfitter-Guides		Limit summer and fall outfitter-guide permits to those existing, unless a demonstrated need can be shown to issue new permits. Allow no outfitter-guide camps in the West Fork of the Jarbidge River.	Vehicle restrictions are listed below (see travel plan map for details): 1. A small area south of the Mahoney Administrative Site and above the powerline road is closed to prevent further soil damage on the steep terrain. 2. The Bear Creek drainage is closed to all vehicles except on the designated roads. The drainage is the municipal watershed for Jarbidge and travel is restricted to protect the watershed surface. Snowmobile travel is permitted.
Off-road Vehicle		Update travel plan to control off-road vehicle use and to provide protection for vegetation, soil, and other resources.	

Management Direction, Standards, and Guidelines for the Jarbidge Management Area

PRACTICES		MIH	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RECREATION (CONT.)				
Trail System Construction		A11	Construct trailhead facilities.	Proposed Trailhead Construction Sites: 1. Snowslide (Complete) 2. Slide Creek 3. Hummingbird Spring 4. Dove Creek 5. Camp Draw 6. Marys River
				Design fences in bighorn sheep areas to minimize impacts to bighorn sheep.
WILDLIFE				
Surveys, Planning Prescriptions Monitoring, Cooperation and Administration		O01	Manage California bighorn sheep winter and summer range.	
				First priority is structural improvement work to provide habitat for Lahontan cutthroat trout. Follow Lahontan Management Plan.
Range Resource Planning		D01	Provide a level of management on all allotments that will maintain all suitable range in satisfactory ecological condition.	Attempt to acquire Robinson Hole (160 acres) to increase management options to improve mule deer winter range.
				Manage livestock to protect snowbank areas from excessive use and soil damage.
TIMBER				
Timber Stand Improvement		E05	No grazing allotments will be created in the West Fork of the Jarbidge River.	
		E06	Use K-V funds to manage Christmas trees for improved form.	

Management Direction, Standards, and Guidelines for the Jarbidge Management Area

PRACTICES	MDH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
TIMBER (Cont.) Timber Harvest Administration	E07	Develop a personal use firewood program.	Provide temporary access where needed to harvest dead and green firewood. Firewood cutting will not be allowed in Jarbidge Canyon. Provide firewood areas with good accessibility and easy operability for the elderly, handicapped, and disadvantaged people.
		No commercial woodcutting will be allowed in the West Fork of the Jarbidge River.	
	F01	Conduct hydrologic analysis on municipal watersheds and develop management plans where needed.	
SOIL & WATER Inventory	F03	Give priority to problem areas in high value watersheds.	
Improvement			
Administration/ Management	F04	Maintain and protect municipal watersheds.	Water quality will be improved or maintained in the Jarbidge municipal watersheds.
		Continue cooperative efforts with Federal and city water agencies.	
LANDS Land Acquisition	J15	Attempt to acquire private land to enhance mule deer winter range.	Attempt to acquire 160 acres in Robinson Hole to increase management options to enhance mule deer winter range.
Research Natural Areas		Protect the Jack Creek Research Natural Area from disturbance while it is being considered for designation and following designation.	

Management Direction, Standards, and Guidelines for the Jarbridge Management Area

PRACTICES	MIH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
Research Natural Areas		Return the proposed Jack Creek Research Natural Area (RNA) to multiple use management if it is not designated as a RNA.	
FACILITIES			
Road Operation	L19	Maintain roads for public and administrative use.	Provide roads to trailhead facilities.
FAMO Facility	L25	Correct health, safety, and sanitation deficiencies at all sites.	Clean up abandoned telephone lines.

JARBIDGE WILDERNESS -64,667 ACRES AND RECOMMENDED WILDERNESS ADDITION - 26,400 ACRES MANAGEMENT AREA

Description

This management area includes 87,667 acres located in the northeastern part of Nevada near the Idaho-Nevada state line. It includes the high mountains and deep glaciated canyons of the Jarbidge Wilderness. This extremely rugged and scenic area has eight peaks that exceed 10,000 feet and deep canyons below 7,000 feet. With extreme variations in elevation, moisture and soil, there are many species of vegetation that add great beauty to the area. The bright and varied colors of vegetation, soil and rock add to the spectacular scenery while remoteness and difficult access over rough roads and trails provide excellent opportunities for complete solitude.

The 64,830-acre wilderness includes the Jarbidge Mountain Range, the East Fork of the Jarbidge River, Marys River drainage and the headwaters of Camp Creek and Cottonwood Creek. The wilderness is within the Humboldt National Forest, Jarbidge Ranger District, Elko County, Nevada. There are four forty acre parcels of private land within the wilderness.

The Jarbidge Wilderness was designated a Wild Area on April 9, 1958, and was changed to a wilderness by the Wilderness Act of September 3, 1964. This area is the only formally designated wilderness in Nevada. Three adjacent areas: Fox Creek, Goat Creek, and Cottonwood-Camp Creek are proposed additions to the wilderness area. If classified as wilderness, they will add 23,280 acres to the Jarbidge Wilderness. Copies of the legal description and a map of the Wilderness are on file in the office of the Chief of the Forest Service in Washington, D.C.; the Regional Forester in Ogden, Utah; the Forest Supervisor in Elko, Nevada; and the District Ranger in Buhl, Idaho.

The Jarbidge Wilderness has not been heavily used by recreationists because of long distances, poor transportation, few fishing areas, and a lack of publicity. An ideal opportunity exists to plan facilities and controls before the area becomes more popular. Conflicts exist in isolated problem areas such as Mary's River between grazing and wilderness recreation. However, over one-half of the allotments within the wilderness are closed to grazing.

During the 1970 decade there were four wildfires recorded in this management area. Two of these wildfires were started by lightning with the remainder being man-caused. The largest fire during this decade was eight acres and burned in 1974. Since that time a fire started by lightning in 1981 burned 765 acres. The reason for this large fire was extreme fire danger conditions. Historic wildfire records indicate that this management area experiences wildfires that are less than one acre in size and occur at a rate of one fire per year.

Management Prescription

Manage the existing Wilderness Area in accordance with the Wilderness Act of 1964. Manage the remainder of the recommended proposed wilderness to protect its wilderness characteristics pending a decision by Congress.

Wilderness: Protect the area to preserve its natural state. Allow the ecosystem to function without man-caused interference, except for fire control.

Recreation: Manage recreation to be compatible with the wilderness resource.

Work with wilderness users (through permits, trail transportation development, outfitters and information and education) to avoid overuse of the more popular areas.

Range: Manage range use to be compatible with the wilderness resource.

Manage livestock grazing on existing allotments within grazing capacities to avoid detracting from wilderness values.

Water and Soil Monitor water quality to evaluate effects of acid rain.

Minerals: Manage minerals and energy development activities to protect the wilderness resource.

Lands: Acquire 160 acres of private land.

Protection: Restore fire to its natural role in the ecosystem by allowing natural fires to burn.

Wildlife and Fish: Maintain wildlife and fish habitat and coordinate with other uses.

Air Quality: Manage the airshed over the Jarbidge Wilderness to meet Class I air quality standards.

PRACTICES	MTH		MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
	CODE			
RECREATION Cultural Resource Planning, Inven- tory, Evaluation, Nomination, Pro- tection	A01		Inventory and evaluate known sensi- tive areas. Nominate and protect as necessary. Develop plans for manage- ment alternatives.	Continue inventory and evaluation of historic mining complex and cabins in the Gout and Falls Creek drainages. As appropriate, non- inate to the National Register and develop a plan which specifically addresses manage- ment obligations for cultural resource in a designated wilderness.
	A02			
	A03			
	A04			
Outfitter Guide	A08		Manage outfitter guide camps to minimize conflicts with wilderness values.	Inventory and evaluate Hummingbird Springs
				Limit summer and fall outfitter-guide permit to those existing, unless a demonstrated need can be shown to issue new permit.
				Corrals will be dismantled and poles scattered or piled off the trail.
				Tent frames will be dismantled and moved away from the trail.
Trail System Maintenance and Operation			Maintain 75 miles of trail each year to prevent resource damage and pro- vide for public safety.	Where conflicts exist effort will be made to locate outfitter-guide camps at different sites.
				Spike camps at Hardluck and Torg's Camp will be monitored and relocated if necessary.
	A12			Construct no new trails. Concentrate money and time on relocation and upgrading existing trails to reduce resource damage and to improve user safety.
				Registration boxes at Camp Draw and Dave Island will be removed and relocated at the road end.

READER

Management Direction, Standards, and Guidelines for the Recommended and Existing Jarbidge Wilderness Management Area

PRACTICES	MTH	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>WILDERNESS</u>	CODE		
Wilderness Use Administration	B03	Reduce conflicts between wilderness values and other resources.	Obtain a boundary adjustment to improve manageability of wilderness.
<u>WILDLIFE & FISH</u>	C01	Provide habitat for sensitive and Federally listed T&E species.	Within existing budgetary constraints, give priority to inventory and monitoring of Lahontan cutthroat trout streams and identifying necessary habitat improvements in these streams.
Surveys, Planning, Prescriptions, Monitoring, Cooperation and Administration			
<u>LANDS</u>	J13	Acquire private land within the wilderness area if and when it becomes available.	
Land Exchange Acquisition	J15		

MOUNT MORIAH MANAGEMENT AREA - 44,558 ACRES

Description

The Mt. Moriah Management Area is located approximately 36 miles east of Ely, Nevada, in east-central Nevada and is entirely within White Pine County. This unit is in the northern Snake Range, which extends along the eastern edge of Nevada in the Basin and Range physiographic province. It encompasses much of the lower elevation land surrounding the Mt. Moriah Recommended Wilderness.

This area is accessible via U.S. Highway 50-6 from the south and improved dirt roads of Spring Valley and Snake Valley on the east and west. Baker, Nevada, and Gandy, Utah, are the only communities in the immediate area. Ely, Nevada (36 miles west) and Delta, Utah (87 miles east) are the nearest main population centers.

Rock types include Paleozoic sediments and Tertiary intrusives. Soils are very rocky with some erosion potential.

This area is within the Intermountain sagebrush/ponderosa pine ecosystem. Pinyon pine, juniper and ponderosa pine dominate most of this area, with some sagebrush-grass types intermixed. Mountain mahogany patches are typically confined to south and west facing slopes near the upper elevations. Riparian vegetation occurs along the streams.

There are no developed recreation sites in the area. The majority of use comes from hunting in the fall and is associated with roads. Dispersed area use is approximately 4,000 RVDS annually. A number of caves similar in type to Lehman Cave are present.

Several archaeological sites and caves are present in the northeastern portion of the Management Area.

Approximately four miles of poor condition trail are present.

A variety of wildlife and fish species inhabit this area. Some are year-long residents while others occur only seasonally. The majority of the area is mule deer winter range except for the southwest portion which is used year-round. Rocky Mountain bighorn sheep also winter in the east half of the unit. Blue grouse and sage grouse are found in riparian areas and at the higher elevations. Chukar partridge occur in some of the sagebrush-grass areas at the lower elevations. Rainbow trout, brook trout, and the unique Bonneville cutthroat trout are found in the area's perennial streams. Twenty log and rock pool structures are located in Hendry's and Hampton Creeks. These were constructed to improve pool/riffle ratios for Bonneville cutthroat trout.

The Mt. Moriah Management Area contains portions of two cattle allotments and has been heavily developed for cattle grazing. The western half of this area contains several hundred acres of vegetative manipulations. These include chainings and herbicide treatment areas. There are also several

miles of fence and numerous water developments that were constructed to improve cattle distribution. Cattle use in the management area amounts to 1,560 AUMS. Both allotments have improved allotment management plans. The range resource in this unit is generally in fair condition.

The Moriah Wild Horse Territory was designated in 1974 in the northern portion of the management area. There has not been any documented horse use since 1971 and it is assumed that there are no horses in the territory. The territory will be reevaluated by 1986 to determine if it should be eliminated.

This unit contains several pinenut gathering areas. Cutting of juniper posts, aspen poles and fuelwood also occurs periodically.

Overall watershed value for the area is moderate. Annual snowpack and precipitation are not as high as in the adjacent Mt. Moriah Recommended Wilderness due to this area's lower elevation and its large stands of pinyon and juniper. There are 5 perennial streams in the area.

This unit is rated moderate in prospective potential for base and precious metals. Gold, garnet, and building stone have been mined in the past. Potential remains for increased mining activity. Several claims are located within the management area.

This management area experienced two wildfires during the 1970 decade. Both of these fires were lightning caused. The largest fire was two acres in size and occurred in 1977. Historic records show that wildfire does not play an active role in this management area.

There is no private land within this unit.

Special-use authorizations include two water transmission and five outfitter-guide permits.

The Moriah Cabin Administrative Site is located in the northwest portion of the unit. The site consists of a one-room cabin and a horse pasture. There are 49 miles of inventoried Forest roads and 16 miles of uninventoried roads present in the area.

Portions of this area were inventoried during the RARE I process. These areas have since been dropped from wilderness consideration due to their small size.

Management Prescription

Recreation: Emphasize dispersed recreation. Manage caves as stated in District Cave Management Plan.

Wildlife and Fish: Habitat for T&E species, critical big game winter range, aquatic species, and MIS will be maintained at levels needed to support either reasonable populations or at least exceed requirements for minimum viable populations.

Range: Maintain an active range program that is compatible with other resource uses. Cost effective management systems and techniques are emphasized to achieve optimal production and use of range on all suitable range and to improve the range resource. Maintenance and reconstruction of existing improvements and construction of new improvements including nonstructural improvements will continue with close adherence to allotment management plans. Noxious weed control efforts will continue following environmental regulations and restrictions. A portion of the Rye Grass Allotment will remain closed to grazing because of watershed values.

Woodland Products: Harvest of woodland products will slightly increase. Fuelwood will be managed to improve range and wildlife habitat as opportunities arise.

Soil and Water: All activities will be constrained as necessary to protect water quality and maintain soil productivity.

Minerals: Mineral proposals will be handled expeditiously and operations will be carried out in an environmentally sound manner.

Protection: An appropriate suppression response will be made on all wildfires.

Lands: Continue existing special uses. Allow new special uses if proponent shows National Forest land to be best location and no unacceptable impacts occur.

Facilities: The Moriah Administrative Site (also called Dog Springs) withdrawal has been recommended for revocation. Remove those buildings no longer needed. Coordinate road management with all other activities.

Management Direction, Standards, and Guidelines for Mt. Moriah Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>RECREATION</u>			
Cultural Resource Inventory, Evaluation, Protection, Planning	A01 A02 A03 A04	Inventory and evaluate known sensitive areas. Nominate and protect as appropriate.	Supplement inventory and evaluate Smith Creek Archaeological District. Nominate and protect as appropriate. Develop plan to address management alternatives.
Cave Management	A08	Update and follow approved Cave Management Plan.	Do not issue cave entrance permits to inexperienced spelunkers. Warn qualified spelunkers of cave hazards. Spelunkers must know exact location and name of cave before permit will be issued. Encourage NPS not to give cave locations. Maintain trails to Level 2.
Trail System Maintenance and Operation	A12	Provide a trail system adequate for administrators, permittees, and the public.	
<u>WILDLIFE</u> Surveys, Planning Prescriptions, Monitoring Cooperation and Administration	C01	Provide habitat for sensitive and Federally listed T&E species.	Allow reintroduction of Bonneville cutthroat trout. Provide structural improvement work to improve habitat for Bonneville cutthroat trout. Conduct macroinvertebrate sampling procedures on Handrys and Hampton Creeks. Design fences in bighorn sheep areas to minimize impacts to bighorn sheep.
Improvements Maintenance (Structural)	C04	Improve the quantity and quality of terrestrial and riparian habitats.	Maintain existing pool structures in Handry's and Hampton Creeks.

PRACTICES	MHA		MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
	CODE			
RANGE Range Administra- tion and Manage- ment	D07		Administer the range resource within the direction in annual operating plan and the allotment management plan.	The annual operating plan of use will direct grazing management of the areas open to grazing in the Rye Grass watershed.
			Manage wild horses in accordance with the proposed Mount Moriah Wild Horse Territory Plan.	Abolish the Mount Moriah wild horse territory where viable populations do not exist and resource conditions do not warrant reintroduction as outlined in the proposed territory plan.
TIMBER Inventory	E00		Inventory white fir sites to determine adaptability to intensive Christmas tree cultivation.	
	E05 E06		Use K-V funds to manage Christmas trees for improved form.	
			Where practical, use K-V funds to manage Christmas trees (especially white fir) to create plantations on selected areas.	
			Provide for personal use Christmas tree sales.	Prepare and offer 1,000 to 2,000 Christmas trees every year District-wide as per Forest activity schedule.
			Provide for commercial Christmas tree sales	Encourage noncommercial or individual users to utilize remote sources of white fir Christmas trees.
				Design Christmas tree sales to control white fir invasion of aspen stands.
Timber Harvest Administration	E07			

Management Direction, Standards, and Guidelines for Mt. Moriah Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>TIMBER</u> (Cont.) Timber Harvest Administration		Harvest green firewood in a manner that results in natural regeneration of the stand where type conversion is not desired.	Lumber pine removal will be allowed only in specific cases (such as its removal as a hazard trees) and where authorized by a special permit issued by the District Ranger.
		Provide post and poles as requested and as supply warrants.	Allow no cutting in the mountain mahogany, aspen, cottonwood, white fir and mixed conifer until after August 1st of each year to protect nesting wildlife.
			No green pinyon pine with a diameter less than 6 inches will be cut in a designated green fuelwood cutting area unless authorized by special permit or tag.
			Allow no cutting of live or standing dead ponderosa pine unless it poses a hazard to life or property.
		Prepare and offer commercial pinenut sales as crop allows.	
		Maintain traditional pinenut gathering areas.	

Management Direction, Standards, and Guidelines for Mt. Moriah Management Area

PRACTICES	MHA	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
IMPER (Cont.) Bristlecone Pine Management	CODE	Protect ancient bristlecone pine.	Protect bristlecone pine, including remnants, from destruction or removal by unauthorized persons.
			Authorize the disturbance of bristlecone pine sites only with written permission of the Forest Supervisor.
			Continue scientific research but don't allow the cutting of live or dead bristlecone pine without written approval of the Forest Supervisor.
<u>SOIL & WATER</u> Improvement	F03	Give priority to problem areas in high value watersheds and where accelerated erosion exists or is rapidly increasing.	Monitor the Rye Grass watershed project, keeping the present closure on severely eroded areas as needed and coordinating use of other portions with Annual Plans of Use with grazing permittees.
<u>FACILITIES</u> FMO Facility & Maintenance	L25	Remove facilities no longer needed	Remove Moriah (Dog Springs) Administrative Site Cabin.

MOUNT MORIAH RECOMMENDED WILDERNESS MANAGEMENT AREA - 60,700 ACRES

Description

The Mt. Moriah Recommended Wilderness is located approximately 36 miles east of Ely, Nevada, in east-central Nevada, and is entirely within White Pine County. This unit is in the northern Snake Range, which extends along the eastern edge of Nevada in the Basin and Range physiographic province. The elongate north-south running range is bounded on the west by Spring Valley and on the east by Snake Valley.

This area has wilderness qualities and several special attractions. The rugged terrain and lack of access provide many opportunities for solitude and wilderness experiences. Mt. Moriah, which has an elevation of 12,050 feet and adjacent 1,000 acre plateau known as the Table, are the center of the area's attractions. The Table is a unique high elevation plateau covered with subalpine vegetation. Ancient bristlecone and limber pine stands occur along its edge. Rocky Mountain bighorn sheep and the Bonneville cutthroat trout are also special attractions in this area.

Rock types include Paleozoic sediments and Tertiary intrusives.

Soils are very rocky and exhibit some erosion potential.

This area lies within the Intermountain sagebrush/ponderosa pine ecosystem. Vegetation varies with the elevation. Pinyon pine and juniper dominate the lower slopes. Aspen, mountain mahogany, white and Douglas-fir, limber pine, and bristlecone pine are found in the upper elevations. Sagebrush-grass types are located throughout the area.

All recreation use occurs as dispersed activities. Hunting is the major activity, followed by hiking, fishing, camping and sight-seeing. There are no developed sites adjacent to the area. Approximately 500 RVDs occur each year. There are 46 miles of poor-fair condition trails.

Archaeological sites including caves utilized by Indians, pictographs, and lithic scatters occur in the area.

A variety of wildlife and fish species inhabit this area. Some are year-long residents while others occur only seasonally. The majority of the area is mule deer summer range although some of the lower elevation benches and riparian areas are used year-round. Rocky Mountain bighorn sheep can be found throughout the year in this unit. Blue grouse, sage grouse, and chukar also occur. Riparian vegetation provides key habitat for these gamebirds and many other species. Rainbow trout, brook trout, and the unique Bonneville cutthroat trout occur in the area's perennial streams.

Cattle grazing occurs throughout this unit. Use is relatively light compared with the surrounding Mt. Moriah Management Area due to the rugged topography of the recommended wilderness. This area includes approximately 71 percent of the Rye Grass and Silver Creek cattle allotments. The remaining 29 percent of these allotments form the adjacent Mt. Moriah

Management Area. There are 913 AUMs of livestock use within the recommended wilderness. These allotments are under improved management with intensive management emphasized to seek full utilization of forage allocated to livestock. Range improvements such as fencing and water developments are employed to aid in controlling cattle distribution and thus improve range condition. The majority of the range resource is in fair to good condition.

The Moriah Wild Horse Territory was designated in 1974 in the northern portion of the management area. There has not been any documented horse use since 1971 and it is assumed that there are no horses in the territory. The territory will be reevaluated by 1986 to determine if it should be eliminated.

Use of the area for gathering pinenuts or cutting fuelwood, posts or poles, or Christmas trees is limited due to the area's rugged terrain and inaccessibility.

Overall watershed value is high with little potential for watershed improvement due to the high cost per benefit gained. The value results from the annual snowpack and relatively high precipitation. There are four perennial streams within the unit.

This unit is rated moderate in prospective potential for base and precious metals. Gold, garnet, and building stone have been mined in the past. Potential still remains for increased mining activity. Several claims are within the roadless boundary.

Fire potential in this area is high due to lightning occurrence although no major fires have occurred recently. Six wildfires were recorded between 1970 and 1980. All of these fires were started by lightning. The largest wildfire during this time period burned 110 acres in 1976. The size of this fire was due to terrain and inaccessible conditions.

There is no private land in this unit.

This area was originally inventoried in RARE I and identified for further wilderness study at that time. During the RARE II process the area was allocated to further planning.

Management Prescription

Manage the recommended Wilderness Area to protect its wilderness characteristics pending a decision by Congress.

Wilderness: Protect the area to preserve its natural state. Allow the ecosystem to function without man-caused interference, except for fire control and mineral exploration/development. Place signs at major access points.

Recreation: Manage recreation to be compatible with the wilderness resource. Construct Moriah Summit Trail. Maintain existing trails and construct new trails and trailheads as needed.

Wildlife and Fish: Current habitat use by threatened and endangered species will be maintained and no conflicts from other uses will be permitted. The quality of aquatic habitats will be maintained. Populations of hunted MIS will be maintained at current levels. All other MIS will be maintained at levels that exceed requirements for minimum viable populations.

Range: Manage livestock to be compatible with the wilderness resource.

Woodland Products: No woodland products will be harvested.

Soil and Water: Manage to maintain or improve water quality and soil productivity.

Minerals: Mineral proposals will be handled expeditiously and operations will be carried out in an environmentally sound manner that is compatible with the wilderness resource.

Protection: An appropriate suppression response will be made on all wildfires.

Lands and Facilities: Allow no disturbing uses.

Management Direction, Standards, and Guidelines for the Mt. Moriah Recommended Wilderness Management Area

PRACTICES		MTW	MANAGEMENT DIRECTION		STANDARDS AND GUIDELINES
<u>RECREATION</u>					
Trail Construction	A10		Construct trails as shown in the Forest Action Schedule.		Construct Moriah Summit Trail
Trail System Maintenance and Operation	A12		Maintain existing trails to prevent resource damage and to provide for public safety.		Maintain trails to level 2.
<u>WILDLIFE</u>					
Surveys, Planning, Prescriptions, Monitoring, Cooperation, and Administration	C01		Provide habitat for sensitive and Federally listed T&E Species.		Allow reintroduction of Bonneville cutthroat trout. Provide structural improvement work to improve habitat for Bonneville cutthroat trout.
<u>TIMBER</u>					
Bristlecone Pine Management	E07		Protect ancient bristlecone pine.		Protect bristlecone pine, including remnants, from destruction or removal by unauthorized persons. Authorize the disturbance of bristlecone pine sites only with written permission of the Regional Forester. Continue scientific research but don't allow the cutting of live or dead bristlecone pine without written approval of the Regional Forester.

SCHELL MANAGEMENT AREA - 281,478 ACRES

Description

The Schell Management Area is a large portion of the Schell Mountain range in east central Nevada. It stretches approximately 53 miles from Schellbourne Pass to Connor's Pass and is approximately 12 miles wide at its widest point and tapers to 5 1/2 miles at its northern point. This area is 5 miles east of Ely with steep, limestone peaks forming its main north-south backbone reaching a maximum elevation of 11,883 feet at North Schell Peak. The higher elevations give way to rolling hills to the north, dissected by narrow, steep-walled canyons rising immediately above the valley floor.

Pinyon pine, juniper and ponderosa pine encircle the base of the Schell Management Area grading uphill into sagebrush/grass communities and conifer stringers of white fir, Douglas-fir and Engleman spruce. Limber pine and an occasional bristlecone pine stand as guardians along ridgelines overlooking patches of quaking aspen and mountain mahogany.

This area can be reached by U.S. Highway 93 along the west flank providing access through Schellbourne Pass and Connor's Pass to county road # 293 bounding the east flank. Forest road #427, crossing over Kalamazoo Summit, and the Success Loop, Forest Highway #231 through Duck Creek Basin and over Success Summit, offer scenic drives to the local populace and visitors.

Rock types include Paleozoic sediments (primarily limestone, dolomite, shale, and quartzite) and Tertiary volcanics.

Developed recreation sites include two campgrounds and three picnic areas with a capacity of 77,304 PAOT-days. These sites range from minimally to highly developed including water systems, mini-flush bathrooms and hardened sites. Developed site use has been 6,300 RVD and dispersed area use 54,800 RVDs annually. Additionally, this area has two organization sites and three recreation residences which account for 6,000 RVDs annually.

There are approximately 74 miles of trail in poor condition and use occurs primarily from Ely-McGill residents.

A recently discovered paleontological site known as the Labor-of-Love cave is located within this management area. It contains the only complete skeletal remains of a prehistoric bear called a Cave Bear in the Intermountain area.

A variety of wildlife and fish species inhabit this area. Some are year-long residents while others occur only seasonally. Mule deer occur throughout this area. The higher elevations are used during the summer and the lower benches and foothills during the winter and spring. There are several key deer wintering areas in this unit. Year-round habitat for elk also exists. The majority of the elk use occurs in the south half of the unit although elk sightings have been documented as far north as Schellbourne Pass. An elk population of 450 animals is estimated for this area. Blue grouse, sage grouse, and chukar also occur throughout the unit.

Riparian vegetation provides key habitat for these gamebirds and many other species. Perennial streams throughout the area support populations of rainbow trout, brook, cutthroat, and brown trout. Cave lake also supports a fisheries.

Livestock grazing is a common occurrence throughout the Schell Management Area except for Kraft Canyon which is closed to grazing. This management area contains 16 allotments (9 sheep, 2 cattle, and 5 common use). All allotments are under improved management with a total grazing use of 16,581 Animal Unit Months (AUMs). Most allotments are extensively managed to seek full utilization of forage allocated to approximately 13,708 sheep and 719 head of cows. Some areas, particularly along the northeast and southwest sections of this management area, are intensively managed, utilizing vegetative manipulation practices to optimize production and utilization of desirable forage species.

Several miles of fence, numerous water developments and various grazing systems are employed under direction from improved allotment management plans to improve the range resource. Approximately 80 percent of the range resource is in fair or better condition.

The Schell Management Area is an important source of fuelwood, Christmas trees, pinenuts, poles and posts due to its proximity to the towns of Ely and McGill. The area contains approximately 97 MBF of fuelwood. Fifteen percent of the woodland is considered accessible and available to harvest. Approximately 7 MBF of fuelwood has been harvested annually in recent years.

The west-central portion of this area is an important municipal water source for ranchers in Duck Creek Basin and the town of McGill, NV. McGill receives its municipal water supply from an intricate piping system originating on the Forest. Most major drainages contain perennial streams, but many are small and rarely maintain surface flow beyond the alluvial fans near the mountain bases. Those streams which do maintain a surface flow into the valleys below are important for agricultural purposes. Several erosion control structures are located in Duck Creek Basin to abate headcutting and for stream bank stabilization.

There are 2,000 mining claims within this management area with periodic mineral exploration occurring. The Taylor mining district, containing the Silver King Mine, is the only active locatable claim. It is a highly productive silver mine. Most of the area has high potential for gold and silver.

A majority of the oil and gas exploration activity is concentrated around Indian Creek and north. There are no active leasable claims.

Lightning strikes caused 34 wildfires and human carelessness was responsible for three wildfires during the 1970 decade in this area. They were mostly small fires with the largest reaching 305 acres.

There are 53 special uses in the management area. These include powerlines, water transmissions, electronic sites, recreation residences, organization camps, outfitter-guide, roads, etc. There are 7,633 acres of private inholdings. Much of this has the possibility of consolidating to make land line location much easier. These areas are located in the southern half of the management area.

Berry Creek Guard Station and Teapot Springs Cabin are the only administrative sites in the management area. Several lesser sites with withdrawals have been recommended for revocation in the last two years. There is a total of 139 miles of system and 64 miles nonsystem roads.

Management Prescription

Recreation: Emphasize dispersed recreation except at the Duck Creek Basin developed sites. Maintain existing trails. Continue to work in cooperation with Nevada State Park to develop Cave Lake and area recreation complex.

Wildlife and Fish: Conflicts from other uses will be minimized to maintain and improve when possible quality wildlife and fisheries habitat, especially winter ranges and riparian areas. Conflicts from other uses on current threatened and endangered species habitat will not be permitted.

Range: Maintain an active range program that is compatible with other resource uses. Cost-effective management systems and techniques are emphasized to achieve optimal production and use of forage on all suitable range and to improve the range resource. Maintenance and reconstruction of existing improvements and construction of new improvements including non-structural improvements will continue with close adherence to allotment management plans. Noxious weed control efforts will continue following environmental regulations and restrictions. Kraft Canyon will remain closed to grazing because of watershed values.

Timber: Fuelwood sales will continue in this area as demand and resource potential allow. The cutting of Christmas trees and the sales of fuelwood offer potential for improved range and wildlife habitat. Use of timber stand improvement funds will be used to improve the quality and quantity of Christmas trees and improve roads for better access to available fuelwood supplies. Bristlecone pine and ponderosa pine will be protected from cutting and removal except for research and scientific purposes. Care will be taken to avoid excessive cutting in riparian zones. Protection of MIS habitat will take precedence over fuelwood harvesting where occurrence is indicated.

Water and Soil: All activities will be constrained as necessary to protect water quality and maintain or improve soil stability and production.

Minerals: Mineral operating plans and acres leased for oil and gas will increase slightly. Mineral proposals will be handled expeditiously and operations will be handled in an environmentally sound manner.

Lands: Continue existing special uses. Allow new special uses if proponent demonstrates that National Forest administered land is the best location and no unacceptable impacts occur. Continue efforts to further consolidate N. F. land to make land line location simpler and provide user access.

Facilities: Maintain facilities to meet administrative needs of area. Remove Teapot Springs Cabin if no longer needed. Coordinate road management with all other activities.

Protection: Fire and law enforcement protection agreements with local, federal, state, and city agencies will be maintained. Protection will be commensurate with the value of the resources being protected.

Management Direction, Standards, And Guidelines for the Schell Management Area

MANAGEMENT PRACTICES	MANAGEMENT CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES										
<u>RECREATION</u>													
ROS Management	A02	Maintain the amount of ROS Semi-Primitive Non-Motorized areas.	Allow no permanent roads except for mineral production.										
Cultural Resource Inventory and Evaluation	A02 A03	More fully inventory and evaluate known sensitive areas.	Supplement inventory in areas of Mud Springs and McQuady Creek. Properly evaluate sites and verify locations.										
Paleontological Resource Evaluation and Protection		Protect significant Paleontological locations.	Evaluate significance of Labor-of-Love Cave and protect as appropriate. Develop plan to address management needs and alternatives.										
Facility and Site Management	A07	Manage developed fee sites at the standard level.	Prepare and implement District O&M Plans for all developed sites. Maintain capacities listed below:										
			<table><tr><td>Campgrounds</td><td><u>Capacity PAOT Days</u></td></tr><tr><td>Timber Creek</td><td>5480</td></tr><tr><td>Berry Creek</td><td><u>2960</u></td></tr><tr><td>Total</td><td>8440</td></tr></table>	Campgrounds	<u>Capacity PAOT Days</u>	Timber Creek	5480	Berry Creek	<u>2960</u>	Total	8440		
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East Creek	6624												
Bird Creek	33744												
Timber Creek	<u>28496</u>												
Total	68864												
Facility and Site Management (Cont.)	A07	Develop and implement developed site prescriptions to achieve and maintain desirable vegetative cover.	Complete one developed site vegetative management plan by 1993.										
		Pave Timber Creek and Bird Creek Campground and roads.											

Management Direction, Standards, and Guidelines for the Schell Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RECREATION (Cont.) Facility and Site Management (Cont.)		Convert a portion of Bird Creek picnic area to fee campgrounds.	Do not issue cave entrance permits to inexperienced spelunkers.
	A08	Update and follow approved Cave Management Plan.	Warn qualified spelunkers of cave hazards.
ORV Management		Use travel plan to control off-road vehicle use and provide protection for vegetation, soil and resources.	Spelunkers must know exact location and name of cave before permit will be issued.
			Encourage NPS not to give cave locations.
			Close the north slope of Muncy Creek to all motorized vehicle use for public safety and to prevent further watershed damage.
Trail System Maintenance and Operation		Continue cooperation with Division of State Parks at Cave Lake through temporary road closures to minimize damage to road surface.	Kalamazoo Road #10427 and Cave Mountain Road #10574 may be closed from March 15 to May 1 to prevent damage to the road surface.
	A12	Provide a trail system adequate for administrators, permittees, and the public.	Maintain trails to Level 2.

Management Direction, Standards, And Guidelines for the Schell Management Area

PRACTICES	MIH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>WILDLIFE</u>			
Surveys, Planning Prescriptions, Monitoring, Cooperation, and Administration	C01	Provide habitat for sensitive and federally listed T&E species	Allow reintroduction of Bonneville cutthroat trout.
		Protect and improve key wildlife habitats.	Protect key elk calving habitat and summer concentration areas.
	C02	Improve the quantity and quality of terrestrial and aquatic habitats.	Maintain water developments at Taylor Mine (2 tire type, water troughs for elk) and Gilford Creek (catchment basin for elk).
	C04		Maintain type conversions for wildlife as needed: Sedgal Creek piñon juniper chaining (225 acres) and Duck Creek Basin Mountain Mahogany push (150 acres).
<u>TIMBER</u>			
Inventory Timber Stand Improvement Timber Harvest Administration	B00	Inventory white fir sites to determine adaptability to intensive Christmas tree production.	
	B05 B06	Use K-V funds to manage Christmas tree (especially white fir) to create forest plantations on selected sites.	
	B07	Provide for personal use Christmas tree sales.	Encourage noncommercial or individual users to utilize remote sources of white fir Christmas trees.

Management Direction, Standards, and Guidelines for the Schell Management Area

PRACTICES TIMBER (Cont.) Timber Harvest Administration	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
		Provide for commercial Christmas tree sales.	Control or discourage the removal of white fir Christmas trees in Duck Creek Basin, Success Summit, Cave Mountain, and Cooper Summit to allow these areas to regenerate themselves. These areas will be opened to Christmas tree removal periodically as supplies become available.
Design Christmas tree sales to control white fir invasion of aspen stands.			Prepare and offer 1000 to 2000 Christmas trees every year district-wide as per forest activity schedule.
Harvest green firwood in a manner that results in natural regeneration of the stand where type conversion is not desired.			No green pinyon pine with a diameter less than 6 inches will be cut in a designated green fuel-wood cutting area unless authorized by special permit or tag.
Provide posts and poles as requested and supply warrants.			Allow no cutting of live or standing dead ponderosa pine unless it poses a hazard to life or property.
			Allow no cutting in the mountain mahogany, aspen, cottonwood, white fir, and mixed conifer until after August 1st of each year to protect nesting wildlife.

Management Directions, Standards, And Guidelines for the Schell Management Area

PRACTICES	MTH	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>SOIL & WATER</u>			
Municipal Watersheds	F03	Water quality will be maintained or improved in all municipal watersheds	
<u>LANDS</u>			
Utility Corridors	J01	Utility corridors will be limited to those identified.	Existing corridors are: 1. Cooper Canyon/Cooper Wash 2. Corners Pass
Land Acquisition	J15	Purchase land for National Forest status from willing sellers, using funds from the Nevada Receipts Act.	
<u>FACILITIES</u>			
Facility	L25	Remove facilities no longer needed.	Remove Teapot Springs Administrative Site Cabin.
<u>PROTECTION</u>			
Fire Prevention	P02	Develop a fire prevention program directed toward reducing the number of wildfires.	Inspect recreation residences for fire hazards.

SNAKE MANAGEMENT AREA - 128,669 ACRES

Description

The Snake Management Area is in the southern Snake Range, which extends along the east edge of Nevada in the Basin and Range physiographic province. The elongated north-south trending range is bounded on the west by Spring Valley and on the east by Snake Valley. This area includes all of the Snake Division except for the Wilderness proposal. Elevations vary from 6,000 feet to over 11,000 feet.

The area is located approximately 40 miles southeast of Ely, Nevada, in east-central Nevada, and is entirely in White Pine County. The area is reached by U.S. 93 in Spring Valley and Nevada Highway 487 and Utah Highway 21 in Snake Valley. Nevada Highway 488 extends from Baker, Nevada to Lehman Caves National Monument, which borders the area on the northeast. Baker, Nevada and Garrison, Utah are the only communities in the immediate area.

Rock types include Paleozoic sediments and Tertiary intrusives. Soils are very rocky with some erosion potential.

This area is within the intermountain sagebrush/ponderosa pine ecosystem. Pinyon pine and juniper dominate most of this area with some sagebrush-grass types intermixed. Mountain mahogany patches are typically confined to south and west facing slopes near the upper elevations. Riparian vegetation occurs along the streams.

There are four developed campgrounds and one picnic area which have a capacity of 77,441 PAOT-days. Additionally, there are three interpretive sites with a capacity of 13,850 PAOT-days. Developed site use is 28,400 RVD's and dispersed areas use 31,500 RVD's. Caves are present in the area.

The 640-acre Lehman Caves National Monument, within this area, is administered by the National Park Service. Management of the developed sites is oriented to the Wheeler Peak Scenic Area and Lehman Caves National Monument. The Park Service and Forest Service jointly operate a visitor center at the Monument. They also cooperate on interpretive talks and other areas to achieve mutual objectives. The two agencies tend to complement each other with one providing the major developed attraction (Lehman Caves) and the other camping space and dispersed recreational opportunity.

There are ten miles of trail in good to poor condition. Archaeological sites are present in several areas.

The majority of the area is mule deer spring and winter range although some summer range is located at the higher elevations. A 350-acre chaining is located in deer winter range at the south end of the unit. This chaining was completed to increase mule deer forage in a key wintering area. Rocky Mountain bighorn sheep winter on the west side of the area. Blue grouse and some sage grouse occur throughout the unit. Rainbow trout, brook trout, and the unique Bonneville cutthroat trout occur in the area's perennial streams.

This area receives approximately 2,600 AUMs of domestic livestock use. It contains portions of seven grazing allotments (5 cattle and 2 sheep). All allotments are managed under approved allotment management plans. Several miles of fencing and many water developments located throughout this management area help to regulate livestock distribution and use. Numerous acres of vegetative manipulation have been conducted, mainly along the north and south ends of this area to increase production of desirable forage species. Overall range condition is fair or better.

Grazing is coordinated to comply with recreation demands in high recreation use areas.

All of the Murphy Wash Wild Horse Territory is located in the southern half of this management area. A territory management plan was written in 1978, but no horses have been sighted since 1977.

The Snake Management Area is an important source of fuelwood, posts, poles, Christmas trees, and pinenuts to the people of Baker, Nevada and Garrison, Utah, and to a lesser extent Ely, Nevada. The area contains approximately 75 MBF of fuelwood. Approximately 2 MBF of fuelwood has been harvested annually in recent years.

A soils inventory has been completed and a map prepared for the area. Parent materials include quartzites and limestone. There are several perennial streams, most of which have water transmissions associated with them.

There is a low to high potential for beryllium, tungsten, silver and gold throughout the area. At present there are 6,300 acres under oil and gas lease and 991 mining claims present. Approximately 2 operating plans are processed annually.

There are 21 Special-Use Permits. These include powerlines, water transmission lines, roads, telephone lines, an electronic site and apiary. Private inholdings include 1,517 acres. Land line location does not have a high priority.

Facilities include the Baker Guard Station (outside MA), Lehman Caves home and trailer (outside MA), and several smaller outlying administrative sites. The withdrawals for the smaller sites have been recommended for revocation. There are 101 miles of inventoried Forest roads and 26 miles of uninventoried roads.

Lightning is the major cause of fire. One or two fires occur annually. Law enforcement activities are targeted at recreation and timber.

Management Prescription

Recreation: Emphasize dispersed recreation except at developed sites. Aim developed site management to maintenance of health and safety items. Make group camping facility available. Manage caves as stated in the District Cave Management Plan. Maintain cooperation with NPS at Lehman Caves Visitor Center. Relocate Lexington Arch Trail.

- Wildlife & Fish:** Maintain/improve the quality of big game winter range and aquatic habitats. Current habitat use by threatened and endangered species will be maintained, and no conflicts from other uses will be permitted. Populations of hunted Management Indicator Species (MIS) will be maintained at current levels. All other MIS will be maintained at levels that exceed requirements for minimum viable populations.
- Range:** Maintain an active range program that is compatible with other uses, particularly recreation. Cost effective management systems and techniques are emphasized to achieve optimal production. Maintenance and reconstruction of existing improvements and construction of new improvements, including nonstructural improvements, will continue with close adherence to allotment management plans.
- Timber:** Fuelwood sales will continue to be made on the area as demand and resource potential allow. Use of timber stand improvement funds will be used to improve the quality and quantity of Christmas trees and improve roads for better access to available fuelwood supplies. Bristlecone pine will be protected from cutting or removal except for research and scientific purposes. Care will be taken to avoid excessive cutting in riparian zones. Protection of Management Indicator Species habitat will take precedence over fuelwood harvesting where conflicts exist.
- Soil & Water:** Protecting water quality and maintaining soil productivity will have priority over the use of other resources.
- Minerals:** Mineral proposals will be handled expeditiously and operations will be carried out in an environmentally sound manner.
- Lands:** Allow new special uses if proponent shows Forest to be best location and no unacceptable impacts occur. Remove Scenic Area designation when wilderness legislation is passed.
- Facilities:** Construct new Guard Station, office and water system, and trailer court for seasonals. Remove facilities no longer needed. Maintain housing to a good condition. Coordinate road management with other resource uses.

Protection:

Provide a level of fire protection, insect and disease control and law enforcement that will preserve the Forest environment and provide for public safety.

Management Direction, Standards, and Guidelines for the Snake Management Area

PRACTICES		MTB	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>RECREATION</u>		CODE		
Cultural Resource Inventory, Evaluation, Protection, Interpretation, Planning	A01		More fully inventory and evaluate known sensitive areas. Nominate, protect, and interpret as appropriate.	Supplement inventory in Snake Creek and Baker Creek drainages. Fully evaluate and nominate protect, or interpret as appropriate. Develop management plan to address alternatives and interpretive opportunities.
	A02			
	A03			
	A04			
Facility and Site Reconstruction	A05		Reconstruct facilities to meet health and safety standards and to meet public demand.	Protection of the Osceola Ditch will be continued. The Ditch will be evaluated for nomination to the National Register. Some portions of the Ditch are currently used as a roadway. This use will be continued. Priorities for work: 1. Baker Creek water system and campground fence. 2. Lehman Creek group camping facility. 3. Lehman Creek water system and holding tank. 4. Lehman Trailer road repaving. 5. Visitor Center displays.
	A07		Manage developed sites at a standard level.	Follow guidelines in O&M Plans to maintain capacity as listed below:
Facility and Management			<u>Campgrounds</u>	Capacity <u>PAOT Days</u>
			Lehman Trailer	8,140
			Lehman Creek	17,760
			Wheeler Peak	14,245
			Baker Creek	14,800
			Snake Creek	<u>6,120</u>
			Total	61,065
			<u>Picnic grounds</u>	Capacity <u>PAOT Days</u>
			Lehman Creek	22,496

Management Direction, Standards, and Guidelines for the Snake Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES	
			Interpretive Sites	
RECREATION (Cont.) Facility and Management	A07	Manage developed sites at a standard level.	Lehman Caves VC	3,900
			Osoola Ditch	3,050
			Mysterious Rock Art	<u>6,900</u>
			Total	13,850
			Fence Baker Creek Campground.	
Facility and Site Management (Cont.)	A07	Eliminate conflicts between recreational use and livestock.		
		Provide Information Services at Lehman Caves Visitor Center.		
			Information Service will be provided May 15 to Sept. 30 at Visitor Center.	
Cave Management	A08	Pave Baker Creek road and campground if money becomes available.		
		Do not further develop Lower Baker Creek and Greys Cliffs areas.		
		Update and follow approved Cave Management Plan.		
ORV Management			Do not issue cave entrance permits to inexperienced spelunkers.	
			Warn qualified spelunkers of cave hazards.	
			Spelunkers must know exact location and name of cave before permit will be issued.	
			Encourage NPS not to give cave locations.	
			Restrict vehicles to existing roads and trails in the Wheeler Peak Scenic Area to protect the scenic quality.	

Management Direction, Standards, and Guidelines for the Snake Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>RECREATION</u> (Cont.)			
ORV Management		Maintain the travel plan to control off-road vehicle use and to provide protection for vegetation, soil, and other resources.	Close Lehman Creek Trail #079, Solace Loop Trail #118, Horse Trail #091, Baker Lake Trail #080 and Shoshone Trail #081 to all motorized use for public safety and to avoid avoid user conflicts. The Baker Creek Road #590 may be closed from March 15 to May 1 to prevent damage to the surface. Relocate Lexington Arch Trail (005). Maintain trails to Level 2.
Trail Construction	A10	Reconstruct trails as shown in the Forest Action Schedule.	
Trail System Maintenance and Operation	A12	Provide a trail system adequate for administrators, permittees, and the public.	
<u>WILDLIFE</u>			
Improvements (Nonstructural)	002	Improve the quantity and quality of terrestrial and riparian habitats.	Maintain Murphy Wash chaining in key deer winter range, as needed.
<u>RANGE</u>			
Range Administration and Management	D07	Manage wild horses in accordance with the approved Murphy Wash Territory Plan.	Abolish the Murphy Wash Wild Horse Territory where viable populations do not exist and resource conditions do not warrant reintroduction as recommended in the approved territory plan.
<u>TIMBER</u>			
Inventory	E00	Inventory white fir sites to determine adaptability to intensive Christmas tree cultivation.	
Timber Stand Improvement	E05 E06	Use K-V funds to manage Christmas trees for improved form.	

Management Direction, Standards, and Guidelines for the Snake Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
TIMBER (Cont.) Timber Harvest Administration	B07	Harvest green firewood in a manner that results in natural regeneration of the stand where type conversion is not desired.	Limit fuelwood and Christmas tree cutting and post and pole cutting adjacent to the Wheeler Peak road #446 or in Baker Creek above the narrows except for the removal of hazardous trees. No green piñon-pine with a diameter of less than 6 inches will be cut in a designated green cutting area unless authorized by a special permit or tag. Limb pine removal will only be allowed in specific cases (such as its removal as hazard trees) and where authorized by special permit issued by District Ranger. Allow no cutting of live or standing dead ponderosa pine unless it poses a hazard to life or property. Avoid excessive removal of piñon-pine trees from the Lexington Creek and Strawberry Creek areas because of their pinant producing potential. Allow no cutting in the mountain mahogany, aspen, cottonwood, white fir, and mixed conifer until after August 1st of each year for nesting wildlife. Live aspen, white fir or other species which have been severely damaged by wind or snow may be cut and removed when designated under permit by the District Ranger. Limb pine removal will only be allowed in specific cases (such as its removal as hazard trees) and where authorized by special permit issued by the District Ranger.
		Design Christmas tree sales to control white fir invasion of aspen stands.	

Management Direction, Standards, and Guideline for the Snake Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>TIMBER</u> (Cont.) Bristlecone Pine Management		Protect ancient bristlecone pine.	Properly sign the Pole Canyon road to prevent unintentional removal of bristlecone pine.
			Protect bristlecone pine, including remnants, from destruction or removal unless authorized by the Forest Supervisor.
			Authorize the or disturbance of bristlecone pine sites only with written permission of the Forest Supervisor
			Continue scientific research but don't allow the cutting of live or dead bristlecone pine without written approval of the Forest Supervisor.
Timber Harvest Administration		Prepare and offer commercial pinenut sales as crop allows.	No commercial pinenut harvesting will be allowed in campgrounds or along the Wheeler Peak road #446 or in Baker Creek above the narrows.
		Maintain traditional pinenut gathering areas.	Consider Strawberry Creek and Weaver Creek, off limits to commercial pinenut harvesters when yearly supplies are limited.
<u>LANDS</u> Land Acquisition	J15	Purchase land for National Forest status from willing sellers using the funds from the Nevada Receipts Act.	
<u>FACILITIES</u> Facility Maintenance	L25	Remove facilities no longer needed.	Remove Baker trailer, Murphy Wash, and Cedar Cabin Spring Administrative site facilities.

BRISTLECONE RECOMMENDED WILDERNESS MANAGEMENT AREA - 51,700 ACRES

Description

The Bristlecone Recommended Wilderness Area is in the southern Snake Range. It extends along the east edge of Nevada in the Basin and Range physiographic province. The elongated north-south trending range is bounded on the west by Spring Valley and on the east by Snake Valley. Elevations vary from 6,000 feet to over 13,000 feet.

The area is located approximately 40 miles southeast of Ely, Nevada and is entirely in White Pine County.

The east side perimeter of the area is accessed by paved and improved dirt roads. West side access is by unimproved dirt roads.

The southern Snake Range has excellent wilderness qualities. Approximately half of the area was designated as a Scenic Area in 1958 to protect its outstanding scenic, geologic, and botanical values. The 13,063-foot Wheeler Peak is a very prominent landmark. There are five alpine lakes in various drainages. The backbone of the Snake Range is narrow and not easily traversed. Below the crest are steep, rocky canyons with Englemann spruce, limber pine, white fir, aspen and scattered ponderosa pine and Douglas fir. At the highest elevations are bristlecone pine for which the area is noted and named.

Approximately 39 miles of trail traverse the area. Included in this figure are 10 miles of a National Recreation Trail System. Trail conditions range from good to poor. A permanently signed interpretive trail is present within the area which receives 900 RVDs of use annually. Annual dispersed use for the area is 4,200 RVDs.

A variety of wildlife and fish species inhabit this area. Some are year-long residents, while others occur only seasonally. The majority of the area is mule deer summer range. Rocky Mountain bighorn sheep also summer in the western half of the area. Blue grouse can be found throughout the unit. Rainbow trout, brook trout and the unique Bonneville cutthroat trout occur in the area's perennial streams. Fisheries also occur in some of the high elevation lakes.

Livestock grazing occurs throughout much of the area except the high mountain area around Stella and Teresa Lakes. Use amounts to approximately 1,764 AUMs and is shared between portions of five grazing allotments (3 cattle and 2 sheep) during the summer months. Cost-effective management systems and techniques including a small amount of fencing and water developments are employed to improve livestock distribution and to promote uniform forage use as directed through approved allotment management plans. Approximately 71 percent of the range resource is in fair or better condition.

A soils inventory has been completed and maps prepared for the area. The majority of parent material is quartzite or limestone. The headwaters of several perennial streams extend along the area.

The western half of the area has high potential for beryllium, tungsten, silver and gold. The east half has low potential. There are no oil and gas leases. There are 131 mining claims. Approximately one operating plan is submitted annually.

The only special uses are those associated with research or environmental monitoring. A Research Natural Area has been proposed to the northeast of Mt. Washington. Included are bristlecone pine trees which may be over 3,000 years old. Efforts are directed at protecting this area, including keeping it isolated from roads and other improvements. No private land is totally within the proposal.

No facilities are located in the proposal.

Management Prescription

Manage the recommended wilderness area to protect its wilderness characteristics pending a decision by Congress.

- Wilderness: Protect the area to preserve its natural state. Allow the ecosystems to function without man-caused interference, except for fire control and mineral exploration/developments. Obtain language in Wilderness Bill to allow existing interpretive signs at bristlecone interpretive site.
- Recreation: Manage recreation to be compatible with the wilderness resource. Maintain existing trails and construct new trails as needed. Construct a trail from Wheeler Peak summit to North Fork of Baker Creek.
- Wildlife and Fish: Maintain/improve the quality of aquatic habitats. Current habitat use by threatened and endangered species will be maintained and no conflicts from other uses will be permitted. Populations of hunted MIS will be maintained at current levels. All other MIS will be maintained at levels that exceed requirement for minimum viable populations.
- Grazing: Grazing use will be managed to maintain the wilderness quality of this area and to be compatible with recreational activities. Maintenance, reconstruction and construction of new improvements will follow wilderness management constraints.
- Timber: Allow no harvest.
- Soil and Water: Protecting water quality and maintaining soil productivity will have precedence over the use of other resources.

Minerals:

Allow valid mineral and energy exploration and development activities on existing claims and leases while protecting the wilderness resource.

Lands:

Permit no disturbing uses. A Research Natural Area is recommended to the northeast of Mt. Washington; an Establishment Record will be prepared and submitted to the Regional Forester. Post wilderness boundary at major access points. Remove Scenic Area designation from the entire division following wilderness legislation.

Management Direction, Standards, and Guidelines for the Bristlecone Recommended Wilderness Management Area

PRACTICES	MNH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>RECREATION</u>			
Cultural Resource Inventory, Evaluation, Assessment, Nomination	A01 A02 A03 A04	Examine areas of proposed new trail construction, mine exploration or development areas, or other areas of proposed new surface disturbance and vandalism. Evaluate and nominate as appropriate.	Evaluate Mt. Wheeler heliograph station for possible nomination to National Register.
Use Administration	A08	Maintain the travel plan to control off-road vehicle use and provide protection for vegetation, soil and other resources.	Close the Solace Trail #118 and Horse Trail #091 to all motorized use for public safety and to avoid user conflicts.
Trail Construction	A11	Construct trails as shown in the Forest Action Schedule.	Construct a trail from Wheeler Peak Summit to the North Fork of Baker Creek.
Trail System Maintenance and Operation	A12	Maintain existing trails to prevent resource damage and to provide for public safety.	Maintain trails to level 2 standard. Maintain 10 miles of National Recreation Trail System. This is a high priority.
<u>WILDERNESS</u> Wilderness Use Administration	B03	Continue to maintain existing permaloy signs in portions of the proposed wilderness.	Recommend language in wilderness bill to permit use of existing permaloy signs on Bristlecone Pine Interpretive Trail.
<u>RANGE</u> Administration and Management	D07	Coordinate management of livestock and recreation use to protect the wilderness character of the area.	Enforce grazing closures as outlined in the approved AMP in the Johnson and Baker Lake areas when livestock use creates conflicts with recreational experiences.
<u>TIMBER</u> Bristlecone Pine Management	E07	Protect ancient bristlecone pine.	Protect bristlecone pine, including remnants, from destruction or removal by unauthorized persons.

Management Direction, Standards, and Guidelines for the Bristlecone Recommended Wilderness Management Area

PRACTICES TIMER (Cont.)	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
Bristlecone Pine Management	E07		Authorize the cutting or disturbance of bristlecone pine sites only with written permission of the Regional Forester. Continue scientific research but don't allow the cutting of live or dead bristlecone pine without written approval of the Regional Forester.
<u>LANDS</u> Research Natural Area		Protect the Mt. Washington Bristlecone Research Natural Area from disturbance while it is being considered for designation and following designation. Return the proposed Mt. Washington Bristlecone Research Natural Area (RNA) to multiple use management if it is not designated as a RNA.	
<u>FACILITIES</u> Radio System Operation and Maintenance	L35	Maintain radio system in safe and operable condition. Recommend to Congress that variance be allowed for continued existence of repeater on Bald Mountain for National Forest radio system.	Conduct yearly inspection of Bald Mountain repeater.

WARD MOUNTAIN MANAGEMENT AREA - 39,797 ACRES

Description

The Ward Mountain Management Area is located in the middle of the Egan Range. The Forest boundary is the management area boundary. The area is located five miles south of Ely, Nevada. Nearby small towns are: Ruth and McGill, Nevada. The area forms a backdrop to U.S. Highways 50, 6 and 93.

The area ranges in elevation from 6,800 feet to 10,936 feet at Ward Mountain. The terrain is a result of massive uplifting along fault lines in the Great Basin and Range Province.

This area lies within the Intermountain sagebrush/pinyon-juniper ecosystem. Pinyon-juniper and mountain brush communities dominate much of the lower slopes with islands of sagebrush-grass types intermixed. The upper slopes are covered with white fir, Douglas-fir, limber pine, and bristlecone pine. Aspen stands and sagebrush-grass types also occur at higher elevations.

Access to the area is provided by numerous primitive roads on the north, west, and east sides of the area. U.S. Highway 6 intersects the northwestern corner of the area.

Developed recreation sites include a campground and a picnic area with a combined capacity of 70,074 PAOT days. These sites are moderately developed with water, pit toilets and some site hardening. Developed site use has been 7,100 RVDs and dispersed site use of 20,700 RVDs. Because the Murray Summit area is close to the town of Ely, the area is a center of winter recreational activities.

A variety of wildlife species inhabit this area. Some are year-long residents, while others occur only seasonally. The majority of the unit is used as summer habitat for limited numbers of mule deer. The summer range is in good condition. Mule deer are limited because of lack of watering areas. No permanent streams are located on the area.

Both sheep and cattle grazing occurs within the area on separate allotments. These are: East Ward, Terrace, and West Ward. The East and West Ward allotments are under improved, intensive management. The Terrace allotment is under improved, extensive management because of the lack of structural and nonstructural range improvements.

The Ward Mountain unit is used as a source for pinenuts, Christmas trees, and fuelwood. The area contains approximately 22,000 acres of pinyon-juniper woodland of which 25 percent is accessible and available for harvest. Approximately 70 percent (280 MBF) of the Ely Ranger District fuelwood is removed from this unit annually.

Watershed values on the area are high. The limited amount of live water is used by the nearby communities of Ruth and Ely for domestic water. The area also contains the Murray Watershed Project which was constructed to control runoff and prevent the occasional flooding of Ely which occurred in past years.

There is limited mining activity on the area at present.

Fire potential on this area is high due to lightning occurrence, moderate human activity, and fuelwood slash from past fuelwood sales. Several fires have occurred. Most fires have been relatively small, although an occasional fire has had potential to become large such as the Gubler Canyon burn, which occurred in the late 1950's or early 1960's.

There are six special uses in the management area. These include powerlines, water transmissions, shelters, road and antenna. There are 1,039 acres of inholdings which do not have a high priority for consolidation or exchange.

The major administrative site is the Ely Ranger District Office (outside MA). A small cabin located within the Ward Mountain Campground has been used as seasonal housing in the past. There are 42 miles of inventoried Forest roads and 30 miles of uninventoried roads in the area.

Management Prescription

Recreation: Emphasize dispersed recreation except at Ward Mountain Recreation Site. Install vaulted bathrooms to correct health and safety problems. Install new water system if Ruth-Kennecott pipeline is shut off.

Wildlife & Fish: Populations of hunted Management Indicator Species will be maintained at current levels. All other MIS will be maintained at levels which exceed viable populations. The quality of big game summer range will be maintained.

Range: Continue with a quality range program that optimizes the production and use of forage on all suitable range to the extent it is cost-effective and optimizes wildlife habitat for desired species. Range improvements will be constructed, reconstructed and maintained.

Control noxious weeds as funding levels allow. Areas now closed to grazing will remain closed. Predator control will be allowed on grazing allotments where needed.

Timber:

Fuelwood sales will continue to be made on the area as demand and resource potential allow. The cutting of Christmas trees and the sales of fuelwood offer potential for improved range and wildlife habitat. Use of timber stand improvement funds will be used to improve the quality and quantity of Christmas trees and improve roads for better access to available fuelwood supplies. Bristlecone pine will be protected from cutting or removal except for research and scientific purposes as allowed by permit.

Soil and Water:

Maintain the Murray Watershed to protect the community of Ely, Nevada from potentially damaging high runoff. Allow no activities on the Murray Watershed which would increase erosion or runoff potential. This includes the continued elimination of livestock grazing, no fuelwood collection, confine motorized use to the designated roads, and coordination with mining interests to reduce or eliminate surface impacts.

Minerals:

Mineral proposals will be handled expeditiously and operations will be carried out in an environmentally sound manner. Extra precautions will be taken on any mining or exploration activities that may occur in the Murray Watershed to keep surface disturbance to a minimum.

Protection:

An appropriate suppression response will be made on all wildfires. Interagency cooperation will continue to achieve a cost effective protection program. Use of prescribed fire will be utilized to improve range and wildlife habitat where practical.

Lands:

Existing special uses will be maintained. New special uses will be allowed if proponent shows that National Forest land is the best location and no unacceptable impacts occur.

Facilities:

Facilities required to meet the administrative needs of the area will be maintained. Removal or addition of some structures may be needed.

Road management will be coordinated with other activities.

Management Direction, Standards, and Guidelines for the Ward Mountain Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES																
RECREATION																			
Cultural Resource Inventory, Evaluation	A02 A03	Inventory and evaluate areas of known sensitivity.	Supplement inventory in vicinity of Holt Creek. Properly evaluate all sites and verify locations.																
Facility and Site Reconstruction	A05	Reconstruct facilities to meet health and safety standards and as needed by public demand.	Priority for work: Ward Mountain toilets.																
Facility and Site Management	A07	Manage developed sites at a standard level.	Follow guidelines in District O&M plans to maintain capacity listed below: <table><tr><td><u>Capacity</u></td><td><u>PACT Days</u></td></tr><tr><td><u>Campgrounds</u></td><td></td></tr><tr><td>Ward Mountain</td><td>16,830</td></tr><tr><td>Total</td><td>16,830</td></tr></table> <table><tr><td><u>Picnic grounds</u></td><td><u>Capacity</u></td></tr><tr><td>Ward Mountain</td><td><u>PACT Days</u></td></tr><tr><td></td><td>53,244</td></tr><tr><td>Total</td><td>53,244</td></tr></table>	<u>Capacity</u>	<u>PACT Days</u>	<u>Campgrounds</u>		Ward Mountain	16,830	Total	16,830	<u>Picnic grounds</u>	<u>Capacity</u>	Ward Mountain	<u>PACT Days</u>		53,244	Total	53,244
<u>Capacity</u>	<u>PACT Days</u>																		
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<u>Picnic grounds</u>	<u>Capacity</u>																		
Ward Mountain	<u>PACT Days</u>																		
	53,244																		
Total	53,244																		
		Evaluate alternative water sources for Ward Mtn. if Kennecott pipeline is closed.	Evaluate Riese Spring or Well as an alternative water source.																
			Provide Information Services at the Ely Ranger Station on weekdays.																
			Provide displays and participate in local events.																

Management Direction, Standards, and Guidelines for the Ward Mountain Management Area

<u>PRACTICES</u>	<u>MIH</u> <u>CODE</u>	<u>MANAGEMENT DIRECTION</u>	<u>STANDARDS AND GUIDELINES</u>
<u>RECREATION (Cont.)</u> Cave Management	A08	Update and follow approved Cave Management Plan.	Do not issue cave entrance permits to inexperienced spelunkers. Warn qualified spelunkers of cave hazards. Spelunkers must know exact location and name of cave before permit will be issued. Encourage NPS not to give cave locations.
ORV Management		Maintain travel plan to control off-road vehicle use and provide protection for municipal, watersheds.	The Murray Canyon watershed area is closed to wheeled vehicles, except roads #440, Powderhouse, Elderberry, and Ice Plant Canyon roads, to prevent watershed damage.
Trail System Maintenance and Operation	A12	Provide a trail system adequate for administrators, permittees, and the public.	Maintain trails to Level 2.
<u>WILDLIFE</u> Improvements Maintenance (structural)	C04	Improve the quantity and quality of terrestrial and aquatic habitats.	Maintain water development at Dead Horse Wash.
<u>RANGE</u> Range Resource Inventory	D02	Complete range allotment analysis as needed.	Complete range analysis on Murray Canyon Watershed to Regional standards.

Management Direction, Standards, and Guidelines for the Hard Mountain Management Area

PRACTICES	MHA		MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
	CODE			
<u>RANGE</u> (Cont.)				
Structural Improvements	D05		Range structural improvements will be constructed and maintained to facilitate proper use of the range resource.	Redevelop existing pipelines originating from Kennebec pipeline if pipeline is abandoned.
<u>TIMBER</u>				
Inventory	E00		Inventory white fir sites to determine adaptability to intensive Christmas tree cultivation.	
Timber Stand Improvement	E05 E06		Where practical, use K-V funds to manage Christmas trees (especially white fir).	
Timber Harvest Administration	E07		Provide for personal use Christmas tree sales. Provide for commercial Christmas tree sales.	Prepare and offer 1,000 to 2,000 Christmas trees per year District-wide as per Forest activity schedule. Control or discourage the removal of white fir Christmas trees in Sawmill Canyon to allow this area to regenerate themselves. These areas will be opened to Christmas tree removal periodically as supplies become available. Allow no Christmas tree cutting within the Murray Canyon Watershed boundaries. Design Christmas tree sales to control white fir invasion of aspen stands. Lumber pine removal will be allowed only in specific cases (such as its removal as hazard trees) and where authorized by special permit issued by the District Ranger.

Management Direction, Standards, and Guidelines for the Ward Mountain Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
TIMBER (cont.)			
Timber Harvest Administration		Provide for personal use firewood Program.	Open proposed type conversions in pinyon- juniper to the public for greenwood harvest at least one year prior to project treatment.
		Provide for commercial small fuel- wood sales as requested and supplies are available.	No green pinyon pine with a diameter less than 6" will be cut in a designated green fuelwood cutting area unless authorized by a permit or tag.
			Allow no fuelwood collection or pole cutting within the Murray Canyon watershed boundaries.
			Limb pine removal will only be allowed in specific cases (such as removal as hazard trees) and where authorized by special permit issued by the District Ranger.
			Allow no cutting in mountain mahogany, aspen, cottonwood, white fir, and mixed conifer until after August 1st of each year to protect nesting wildlife.
Bristlecone Pine		Protect ancient bristlecone pine.	Protect bristlecone pine, including remnants, from destruction or removal by unauthorized persons.
			Authorize the cutting or disturbance of bristlecone pine sites only with written permission of the Forest Supervisor.
			Continue scientific research but don't allow the cutting of live or dead bristlecone pine without written approval of the Forest Supervisor.

Management Direction, Standards, and Guidelines for the Ward Mountain Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
TIMBER (cont) Bristlecone Pine		Prepare and offer commercial pinenut sales as crop allows.	Consider Ward Mountain off limits to commercial pinenut harvesters when yearly supplies are limited.
		Maintain traditional pinenut gathering areas.	
SOIL & WATER Inventory	F01	Update hydrologic analysis on the Murray Canyon municipal watershed.	Enforce off-road vehicle closures in Murray Canyon watershed for protection of soil and water resources.
	F04	Maintain and protect the municipal watershed.	
Administration/ Management		Continue cooperative efforts with Federal and city water agencies.	Continue to exclude livestock from the Murray Canyon Municipal Watershed.
	F08	Maintain flood control structures improvements in the Murray Canyon Municipal Watershed.	
LANDS Land Exchange Acquisition or Transfer	J15	Purchase of land for National Forest status from willing sellers, using funds from the Nevada Receipts Act.	

WHITE PINE MANAGEMENT AREA - 344,575 ACRES

Description

The White Pine Management Area lies approximately 50 miles west of Ely in east-central Nevada, in White Pine and Nye Counties. The high peaks of the White Pine Range, reaching over 11,000 feet elevation, and adjacent foothills run generally north-south for 40 miles. The area lies within the Basin and Range physiographic province and is bounded by Railroad Valley to the west and by Jakes and White River Valleys to the east. Access is provided primarily by U.S. Highway 50 from the north and Highway 6 from the east and south.

The terrain is a result of water and volcanic deposited sediments, later uplifted into fault-block mountain ranges. Soils have moderate erosion potential and serious erosion problems occur in several riparian areas.

This area lies within the intermountain sagebrush/ponderosa pine ecosystem. Pinyon pine and juniper dominate the lower slopes and white fir, limber pine and bristlecone pine occupy the upper elevations.

Yearlong dispersed recreation focuses on hunting, fishing, camping and exploring historic mining camps. Developed recreation areas are provided at White River and Currant Creek. There are approximately 5 miles of trails in poor condition which receive light use.

The northern portion of the area contains widespread historic resources associated with the concentration of the old mining camps in the area. Prehistoric sites are found throughout the area; only a few have been recorded.

The area contains important mule deer summer range, migratory routes and some winter range. Mule deer range is in satisfactory condition with stable and downward trends. Portions of the area are important to upland game species, particularly sage grouse strutting grounds and summer habitat. The unit provides habitat for Nevada's northern most population of desert bighorn sheep. Three streams contain fishable quantities of game fish.

The area is intensively managed to produce forage for cattle on six allotments. Most of the range resource is in poor or fair condition with a static trend. Approximately one-quarter of the total forage is provided by revegetated areas. Range development activities have been concentrated on this area; a large number of fence, pipeline and revegetation projects have been completed.

A 227,000 acre wild horse territory has been designated on the western half of the area and is managed according to an approved management plan. Use by wild horses is on the increase. Roundups to maintain the horse population at prescribed levels have been completed and more are planned for the future.

Timber products, including pinenuts, fuelwood, posts and poles, are harvested on a limited basis.

The area is a locally important watershed for the communities of Preston, Lund and Carrant as well as for several ranches which depend on water for irrigation from the four perennial streams. Illipah Reservoir, which impounds water originating on the unit, has recently been expanded to increase recreational fishing opportunities.

Exploration for hardrock minerals has been intensive in several areas with high potential for gold, silver, molybdenum and tungsten. Over 4,000 mining claims have been staked on the area. The White Pine Management Area has the largest amount of oil and gas leasing and exploration activity of all the management areas. Over 230,000 acres are under oil and gas leases and preliminary exploration for oil and gas occurs frequently.

Fire potential in this area is high due to lightning occurrence, although no major fires have started recently. Twenty-one wildfires were recorded between 1970 and 1980, all caused by lightning strikes.

About 4,994 acres of private land are within the National Forest boundary in this management area. Most of this private land is patented mining claims which have created a land line location problem in the northern part of the area. A Research Natural Area has been proposed on White Pine Peak. Efforts will be directed at protecting the area. About 30 special use permits have been issued for communications, water and energy transmission and mining related improvements.

During the wilderness evaluation process (RARE II) nine areas were identified as roadless; none were recommended for wilderness or further study.

Management Prescription

- Recreation:** Developed and dispersed recreation will be managed at a less than standard (RSM) level. Cleanup of dispersed areas will occur only as part of other jobs.
- Wildlife:** Populations of hunted Management Indicator Species (MIS) will be maintained at current levels. All other MIS will be maintained at levels which exceed minimum viable populations. Quality of aquatic habitats and big game winter range will be maintained. Begin study of desert bighorn sheep habitat for possible future designation to desert bighorn sheep range, with special management emphasis for this species.
- Range:** Maintain an active range program that is compatible with other resource uses. Cost-effective management systems and techniques are emphasized to achieve optimal production and use of forage on all suitable range and to improve the range resource. Maintenance and reconstruction of existing improvements and construction of new improvements including nonstructural improvements will continue with close adherence to allotment management plans.

Noxious weed control efforts will continue following environmental regulations and restrictions.

Wild horse numbers will continue to be controlled according to the approved management plan.

Timber: Harvest of fuelwood will slightly increase. Fuelwood will be managed to improve range and wildlife habitat as opportunities arise.

Watershed: All activities will be constrained as necessary to protect water quality and maintain soil productivity.

Minerals: Mineral operating plans and acres leased for oil and gas will increase slightly. Mineral proposals will be handled expeditiously and operations will be carried out in an environmentally sound manner.

Lands: A Research Natural Area on White Pine Peak is recommended; an Establishment Record will be prepared and submitted to the Regional Forester.

Special Uses: Utilities may be constructed in suitable corridors. Special uses will be properly maintained.

Facilities: Buildings and administrative sites not needed will be eliminated. Substandard facilities will be reconstructed and other facilities will be maintained.

Protection: An appropriate suppression response will be made on all wildfires. Interagency cooperation will continue to achieve a cost-effective protection program. Use of prescribed fire will be limited to range and wildlife habitat improvements.

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES												
RECREATION															
Cultural Resource Inventory, Evaluation, Nomination, Protection, Enhancement, Planning	A01 A02 A03 A04	Inventory and evaluate known sensitive areas. Nominate and protect as appropriate. Develop plans to address management alternatives.	Historic resources associated with the Hamilton and Treasure Hill area will be evaluated for nomination to the Historic Register. Develop plan to address interpretive potential. Complete inventory and evaluation of Belmont Mill and Mine. Nominate and protect as appropriate. Develop plan to address interpretive opportunities. Complete inventory and evaluation of Current Mt. Wickiup Site. Nominate and protect. Inventory and evaluate Pioche Stage Stop and associated elements. Nominate and protect as necessary. Supplement inventory in Ellison locality. Fully evaluate all sites. Allow no permanent roads except for mineral production. Follow guidelines in District O&M Plans to maintain capacities listed below:												
ROS and VQO Management	A02	Maintain the amount of ROS Semi-Primitive Non-Motorized areas.													
Facility and Site Management	A07	Manage developed sites at a standard level.													
			<table><tr><td><u>Campgrounds</u></td><td><u>Capacity</u></td><td><u>PAOT Days</u></td></tr><tr><td>White River</td><td>5,480</td><td></td></tr><tr><td>Current Creek</td><td>5,355</td><td></td></tr><tr><td>Total PAOT Days</td><td></td><td>10,835</td></tr></table>	<u>Campgrounds</u>	<u>Capacity</u>	<u>PAOT Days</u>	White River	5,480		Current Creek	5,355		Total PAOT Days		10,835
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Management Direction, Standards, and Guidelines for the White Pine Management Area

PRACTICES RECREATION (Cont.)	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES	
Cave Management	A08	Update and follow approved Cave Management Plan.	Do not issue cave entrance permits to inexperienced spelunkers.	Warn qualified spelunkers of cave hazards.
			Spelunkers must know exact location and name of cave before permit will be issued.	
			Encourage NPS not to give cave locations.	
			Maintain trails to Level 2.	
Trail System Maintenance and Operation	A12	Provide a trail system adequate for administrators, permittees, and the public.		
WILDLIFE & FISH Bighorn Sheep Management	C01	Cooperate with the Nevada Department of Wildlife (NDOW) in managing wildlife.	Allow supplemental transplants of desert bighorn sheep.	
		Manage desert bighorn sheep winter and summer range.	Design fences in bighorn sheep areas to minimize impacts to bighorn sheep.	
			Work with NDOW to establish a study of desert bighorn sheep habitat needs.	
RANGE Range Resource Planning	D01	Reduce conflicts between livestock and wildlife.	Generally defer livestock use of fenced meadows until August 15 of each year to minimize impacts to grouse brood habitat. Specific direction will outlined in the annual plan of use.	
Range Administration	D07	Manage wild horses in accordance with the approved Monte Cristo Territory plan.	Coordinate wild horse population control with BLM and state agencies.	

Management Direction, Standards, and Guidelines for the White Pine Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>TIMBER</u>			
Inventory	E00	Inventory white fir sites to determine adaptability to intensive Christmas tree cultivation.	
Timber Stand Improvement	E05 E06	Where practical, use K-V funds to manage Christmas trees (especially white fir) to create forest plantations on selected sites.	
Timber Harvest Administration	E07	Provide for commercial Christmas tree sales. Provide for personal use Christmas tree sales.	Prepare and offer 1,000 to 2,000 Christmas trees per year District-wide as per Forest activity schedule. Encourage noncommercial or individual users to utilize remote sources of white fir Christmas trees. Design Christmas tree sales to control white fir invasion of aspen stands. Allow no cutting of live ponderosa pine unless it poses a hazard to life or property. No green piñon-pine with a diameter of less than 6 inches will be cut in a designated green fuelwood cutting area unless authorized by a special permit or tag. Allow no cutting of live or standing dead ponderosa pine unless it poses a hazard to life or property.

Harvest green firewood in a manner that results in natural regeneration of the stand where type conversion is not desired.

Provide posts and poles as requested and as supply warrants.

Management Direction, Standards, and Guidelines for the White Pine Management Area

PRACTICES	MCH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
TIMBER (Cont.) Timber Harvest Administration (Cont.)			Allow no cutting in the mountain mahogany, aspen, cottonwood, white fir, and mixed conifer until after August 1st of each year to protect nesting wildlife.
			Avoid excessive removal of pinyon trees from the Secret Springs and Current Creek areas because of their pinyon producing potential.
Bristlecone Pine Management	E07	Protect ancient bristlecone pine.	Protect bristlecone pine, including remnants, from destruction or removal authorized by persons.
			Authorize the disturbance of bristlecone pine sites only with written permission of the Forest Supervisor.
			Continue scientific research but don't allow the cutting of live or dead bristlecone without written approval of the Forest Supervisor.
		Prepare and offer commercial pinyon sales.	
		Maintain traditional pinyon gathering areas.	
<u>LANDS</u>			
Land Acquisition	J15	Purchase land for National Forest from willing sellers, using funds from the Nevada Receipts Act.	
Research Natural Area			Protect the White Pine Research Natural Area from disturbance while it is being considered for designation and following designation.
			Return the proposed White Pine Research Natural Area to multiple use management if it is not designated as a RNA.

QUINN MANAGEMENT AREA - 165,460 ACRES

Description

The Quinn Division Management Area is comprised of all the area on the Quinn Division of the Ely Ranger District not included in the Grant Wilderness proposal. It is located approximately 70 air miles from Ely, Nevada in Nye and Lincoln Counties, Nevada. The north/south oriented Quinn Canyon Range is located in the south half of the management area. Railroad Valley flanks the west side and Garden Valley the east side of the area.

Rock types include Paleozoic sediments and Tertiary intrusives.

Many ridges and side drainages extend east and west from the main ridgeline. Drainages are long and narrow and have large watershed basins that collect and concentrate snowmelt and summer rainfall into narrow "U" shaped canyons. Pinyon and juniper trees, sagebrush, white fir, aspen, and mahogany blend to form natural shaped mosaics. The lower elevations are dominated by pinyon and juniper trees; the upper elevations by sagebrush. Limber pine and bristlecone pine can be found along the crest. Elevations in the management area range from 6,000 feet along the bench to over 10,000 feet along the crest.

Hunting, fishing, camping, and hiking are the dominant recreation uses of the area. There are no developed recreation sites in the area. Approximately 3,500 recreational visitor days (RVD) are spent in the area each year. Most of the recreational use is along Cherry Creek and Pine Creek. Approximately 40 miles of poor condition trails receive light use. Some significant archaeological finds have been located in the management area.

Mule deer and desert bighorn sheep utilize portions of this management area for summer and winter range. Key desert bighorn winter range is found in the northwest part of the management area and key mule deer winter range is found in the northeast part of the management area. Mountain lions, coyotes, and bobcats are common. Blue grouse can be found at high elevations near Timber Mountain and chukar along the benchlands. Many non-game wildlife species live in the area. Pine Creek, Cottonwood Creek, Cherry Creek and Troy Creek support populations of trout. Riparian vegetation provides key habitat for many species of game and non-game animals.

Livestock grazing occurs throughout this management area. Approximately 3,200 animal unit months (AUM) are permitted on four summer cattle allotments and one winter sheep allotment; one allotment is vacant. Three cattle allotments are managed extensively, one intensively, and the sheep allotment is managed so that some cattle use the allotment. Suitable livestock grazing range is very limited in the management area. A history of poor livestock management and a lack of control over boundaries has resulted in poor range condition throughout much of the area. The Quinn Canyon Wild Horse Territory located along the western boundary of the management area supports an estimated 12 to 15 horses.

The Quinn Division Management Area is an important source of pinenuts. Potentially, the area could be an important source of Christmas trees, fuelwood, and to a lesser degree, posts. The Quinn Division is removed from most communities and has received minimal use. The area contains approximately 80 MBF of fuelwood with most of it located in the southern portion of the area. Approximately 15 percent of the woodland is considered accessible and available for harvest. Approximately 4 MBF of fuelwood has been harvested annually in recent years.

Watersheds within this area provide water for four farms, seven perennial streams, springs, and underground aquifers. The main source of water is from winter storms. Little potential exists for watershed improvement due to the high cost per benefit gained.

The Quinn area has a high potential for production of fluorspar, gold, silver, mercury, and molybdenum. Although oil and gas potential is considered low, several high producing oil wells are located five miles from the northeast corner of the management area. Over 1,000 mining claims are held in the area. Prospecting is ongoing, but no producing mines are in operation.

Fires have played a small role in shaping the structure of the vegetative community in this area. Most fires are started by lightning. The largest fire during the decade of the seventies was 200 acres in 1972. The area's climate is hot and dry during the summer, but fuel is scattered and discontinuous, thus hampering the spread of fire except under ideal conditions.

Private land, mainly patented mining claims, within the bounds of this management area totals 542 acres. Some mining roads have been constructed through the years to service past producing mines and conduct assessment or exploration work. There are eight special uses in the management area.

Two administrative sites are located in the management area. Cherry Creek Guard Station is the primary use site; Cottonwood Guard Station consists mainly of one cabin. There are 73 miles of inventoried and 40 miles of uninventoried Forest roads in the Quinn Canyon management area.

Management Prescription

Recreation:

Dispersed recreation will be managed at a less than standard level. Clean-up of dispersed areas will occur only as part of other jobs.

Wildlife and Fish:

The quality of aquatic habitats will be maintained. Big game winter ranges will be maintained at current production levels. Populations of hunted MIS will be maintained at current levels. All other MIS will be maintained at levels that exceed requirements for minimum viable populations.

Range:

Adjustments in permitted livestock numbers are anticipated on this area. Populations of sensitive plant species will be maintained.

Maintain an active range program that is compatible with other resource uses. Cost effective management systems and techniques are emphasized to achieve optimal production and use of forage on all suitable range and to improve the range resource. Maintenance and reconstruction of existing improvements and construction of new improvements including nonstructural improvements will continue with close adherence to allotment management plans. Noxious weed control efforts will continue following environmental regulations and restrictions.

Wild horses will be managed to prevent expansion of the herd outside of the habitat's capabilities.

Timber:

Fuelwood and Christmas tree harvests will be increased to meet increased demands, improve range and wildlife habitat, reduce fire hazard, and control the spread of insects and disease. Pinenuts will be harvested when available. Ponderosa pine and bristlecone pine will be protected for research or scenic purposes.

Water:

Manage and improve water quality and soil conservation through proper range management practices. All activities will be constrained as necessary to protect water quality and maintain soil productivity.

Minerals:

Mineral proposals will be handled expeditiously and operations will be carried out in an environmentally sound manner.

Protection:

An appropriate suppression response will be made on all wildfires. Use of prescribed fire will be limited to range and wildlife habitat improvements.

Lands:

Continue existing special uses. Allow new special uses if proponent shows National Forest land to be the best location and no unacceptable impacts occur.

Facilities:

The Cherry Creek Guard Station will be maintained at its present size. The Cottonwood Guard Station will be maintained as required. Coordinate road management with all other activities.

Management Direction, Standards, and Guidelines for the Quim Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>RECREATION</u> Cultural Resource Inventory, Evaluation, Nomination, Protection, Planning	A01	Inventory and evaluate known sensitive areas. Nominate and protect as appropriate. Develop plans to address management alternatives.	Inventory and evaluate Quim Springs Stage Stop and associated elements. Nominate and protect as necessary. Develop management plan.
	A02		
	A03		
	A04		Supplement inventory in Cherry Creek Summit, Black Spring, Pine Creek, and Little Cherry Creek. Fully evaluate sites.
ROS Management	A02	Maintain the amount of ROS Semi-Primitive Non-Motorized areas.	Allow no permanent roads except for mineral production.
Cave Management		Update and follow approved Cave Management Plan.	Do not issue cave entrance permits to inexperienced spelunkers. Warn qualified spelunkers of cave hazards. Spelunkers must know exact location and name of cave before permit will be issued. Encourage NFS not to give cave locations.
<u>WILDLIFE & FISH</u> Surveys, Planning, Prescriptions, Monitoring, Cooperation, and Administration	C01	Cooperate with NDOI in managing wildlife.	Allow supplemental transplants of desert bighorn sheep as needed.
		Manage desert bighorn sheep summer and winter range.	Work with NDOI to develop a desert bighorn sheep management plan. Protect key desert bighorn sheep winter habitat in Irwin and Troy Canyons and Little Meadows. Design fences in bighorn sheep area to minimize impacts on bighorn sheep.

Management Direction, Standards, and Guidelines for the Quilm Management Areas

PRACTICES		MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
WILDLIFE & FISH	CODE		
Improvement Maintenance (Structural)	004 (Cont.)	Improve the quantity and quality of terrestrial and riparian habitats.	Maintain water developments at Timber Spring and Summer Spring.
RANGE Administration and Management	D07	Manage wild horses in accordance with the proposed Quilm Wild Horse Territory plan.	Coordinate wild horse population control with BLM and State agencies. Adjust boundaries of the wild horse terri- tory where insufficient documentation or actual use and poor range condition indicate a need to alter boundaries for best manage- as outlined in the proposed Quilm Territory plan.
TIMBER Inventory	E00	Inventory white fir sites to determine adaptability to intensive Christmas tree cultivation.	
Timber Stand Improvement	E05 E06	Use K-V funds to manage Christmas trees (especially white fir) to create forest plantations on selected areas.	
Timber Harvest Administration	E07	Provide for personal use Christmas tree sales. Provide for commercial Christmas tree sales.	Design Christmas tree sales to control white fir invasion of aspen stands. Encourage noncommercial or individual users to utilize remote sources of white fir Christmas trees. Prepare and offer 1000 to 2000 Christmas trees District-wide as per Forest Activity Schedule.

Management Direction, Standards, and Guidelines for the Quilm Management Area.

PRACTICES TIMBER (Cont.) Timber Harvest Administration	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
			Design Christmas tree sales to control white fir invasion of aspen stands.
			Limber pine cutting will only be allowed in specific cases (such as its removal as hazard trees) where authorized by special permit issued by the District Ranger.
		Harvest green firewood in a manner that results in natural regeneration of the stand where type conversion is not desired.	Allow no cutting of live or standing dead ponderosa pine unless it poses a hazard to life or property.
		Provide post and poles as requested and as supply warrants	No green pinyon pine with a diameter less than 6 inches will be cut in a designated green fuelwood cutting area unless authorized by permit or tag.
			Limber pine removal will only be allowed in specific cases such as its removal as hazard trees) and where authorized by special permit issued by the District Ranger.
			Allow no cutting of cliffrose on the Soofield bench except for fire control purposes or to stimulate leader growth.
			Avoid excessive removal of pinyon trees from Quilm Canyon, Pine Creek and Cherry Creek area because of their pinenut producing potential.
			Allow no cutting of mountain mahogany, aspen, cottonwood, white fir, and mixed conifer until after August 1 of each year to protect nesting wildlife.

Management Direction, Standards, and Guidelines for the Quim Management Area

PRACTICES	MTH		STANDARDS AND GUIDELINES
	CODE	MANAGEMENT DIRECTION	
TIMBER (Cont.) Bristlecone Management	E07	Protect ancient bristlecone pine.	Protect bristlecone pine, including remnants, from destruction or removal unless authorized in writing by the Forest Supervisor.
			Authorize the disturbance of bristlecone pine sites only with written permission of the Forest Supervisor.
			Continue scientific research but don't allow the cutting of live or dead bristlecone pine without written approval of the Forest Supervisor.
Timber Harvest		Prepare and offer commercial pinenut sales as crop allows.	
		Maintain traditional pinenut gathering areas.	
LANDS Land Exchange Acquisition	J15	Purchase land for National Forest status from willing sellers, using funds from the Nevada Receipts Act.	

GRANT RECOMMENDED WILDERNESS MANAGEMENT AREA - 43,100 ACRES

Description

The Grant Recommended Wilderness Area is located approximately 80 air miles southwest of Ely, in Nye County, Nevada. The management area is entirely within the Grant Mountain Range and is bordered on the east by Garden Valley and on the west by Railroad Valley.

An exceptional attribute of this area is the opportunity for solitude and isolation. The highest point within the area's north/south oriented mountain range is Troy Peak at 11,298 feet.

Paleozoic sediments, Mesozoic granitic intrusives, and Tertiary volcanics can be found within the area.

Timber Mountain bounds the north end of the area and Cherry Creek drainage serves as the boundary for the south end. Many side ridges and drainages spur east and west from the main drainage.

The vast majority of this area is covered by pinyon and juniper. Stands of white fir, mountain mahogany, aspen, and an occasional ponderosa pine comprise areas of the mountain. Bristlecone pine and limber pine grow along the crest of the range near Troy Peak. Barren rock outcrops create a visual contrast to the vegetative cover.

Hunting, hiking, photography and wildlife viewing are the major activities recreationists pursue in this area. Annual recreation use is estimated to be 300 recreational visitor days (RVDs). Approximately seven miles of poor condition trails exist at lower elevations.

A variety of wildlife including mammals, birds, reptiles, and amphibians inhabit this area. Mule deer and desert bighorn sheep summer at the higher elevations of the area around Troy Peak. Many other nongame wildlife species live in the area.

Livestock grazing occurs on an extremely limited basis within this management area due to the lack of water and forage and because of steep, inaccessible areas. The management area lies within two summer cattle allotments, one winter sheep allotment and one vacant allotment. The area provides very few (less than 200 AUMs) animal unit months for grazing. The Quinn Canyon Wild Horse Territory includes the bench on the west side of this area; however, no horses have been sighted within the Grant Range wilderness proposal.

Timber resources produced within the area include pinenuts, posts, firewood, and Christmas trees. The area has a very marginal potential for significant production of these resources since limited accessibility prevents cost-effective utilization of the products.

Very little water is released from this area. Troy Creek is the only perennial stream headwatered within the management area. Springs within and below the area are fed by water collected in this management area.

Mineral potential is rated as high in the north and south ends of the management area and low throughout the central portion. Minerals that are considered to have high potential for development are gold, silver, lead, and fluorspar.

Fire activity is light in this area. Fires are primarily ignited by lightning. Dry weather, common in this area, combined with rough, steep, inaccessible country increases the potential for large fires. The Bordoli fire in 1977 burned 1000 acres.

There are no private lands, special uses, or facilities within this area.

Management Prescription

Manage the recommended wilderness to protect its wilderness characteristics pending a decision by Congress:

- Wilderness: Protect the area to preserve its natural state. Allow the ecosystem to function without man-caused interference, except for fire control and mineral exploration/development. Place signs at major access points.
- Recreation: Manage recreation to be compatible with the wilderness resource. Develop new trails as they are needed and identified to enhance dispersed recreation use.
- Wildlife and Fish: Manage wildlife using methods compatible with wilderness resources. Desert bighorn sheep winter range will be maintained at current production levels. Populations of hunted MIS will be maintained at current levels. Begin study of desert bighorn sheep habitat for possible future designation to desert bighorn sheep range with special management emphasis for this species.
- Range: Manage livestock to be compatible with wilderness resources and Desert bighorn needs.
- Timber: No woodland products will be harvested.
- Soil and Water: Manage to maintain or improve water quality and soil productivity.
- Minerals: Manage minerals resources to prevent impacts to the wilderness character. Development of existing mineral resources will be accomplished using methods that will not impair wilderness character.

Protection:

An appropriate suppression response will be made on all wildfires.

Lands and Facilities:

Allow no surface disturbing uses.

Management Direction, Standards, and Guidelines for the Grant Recommended Wilderness Management Area

PRACTICES	MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>RECREATION</u> Trail System Maintenance and Operation	A12	Maintain existing trails to prevent resource damage and to provide for public safety.	Maintain trails to Level 2 standard.
<u>WILDLIFE</u> Surveys, Planning, Prescriptions, Monitoring, Cooperation, and Administration	C01	Cooperate with NDOI in managing bighorn sheep. Manage key desert bighorn sheep winter range.	Allow supplemental transplants of bighorn sheep as needed. Work with NDOI to establish a study of desert bighorn sheep habitat needs. Design fences in bighorn sheep areas to minimize impacts on bighorn sheep.
<u>RANGE</u> Administration and Management	D07	Manage wild horses to protect the wilderness characteristics.	Maintain wild horse populations at proper levels to protect range condition and wilderness characteristics. Follow direction in proposed Quinn Wild Horse Territory Plan.
<u>TIMBER</u> Bristlecone Pine Management	E07	Protect ancient bristlecone pine.	Protect bristlecone pine, including remnants, from destruction or removal by unauthorized persons. Authorize the cutting or disturbance of bristlecone pine sites only with written permission of the Regional Forester. Allow scientific research but don't allow the cutting of live or dead bristlecone pine without written approval of the Regional Forester.

SANTA ROSA MANAGEMENT AREA - 268,493 ACRES

Description

The Santa Rosa Management Area encompasses the entire Santa Rosa Ranger District. The area is an isolated division of the Humboldt National Forest and is located in the eastern one-third of Humboldt County in northwestern Nevada. National Forest administered lands begin approximately twenty six miles north of Winnemucca and extend north over forty miles to the Nevada/Oregon state line.

The southern half of the management area is steep and rugged, with roads up to the National Forest boundary, but little vehicle access onto the Forest. Granite, Santa Rosa, Paradise and Singas peaks are all over 9,400 feet above sea level. These peaks form a backbone which drops abruptly, through steep canyons to the valley floors on either side of the Forest to an elevation of 4,500 feet. North of Granite Peak the backbone effect of the southern portion is less dominant, giving way to the broad but rugged river basins and head waters of Martin Creek, North Fork of the Little Humboldt River and Quinn River.

The management area is basically a massive complex of alternating rhyolite and basaltic flows with a granitic intrusion through the southwestern portion.

Stream channels are generally lined with willows and aspen. Lower slopes are sagebrush. Some slopes become a mix of sagebrush with snowberry on moist sites and bitterbrush and serviceberry on dryer sties. High moist slopes support pockets of aspen above 6,000 feet. Dry rocky ridges support ourlleaf mountain mahogany and the higherst exposed ridges support some limber pine. There is no pinyon-juniper type on the management area. Wild flowers are abundant.

There are currently 13 grazing allotments on the management area with a total of about 53,000 AUMs. All allotments are presently cattle allotments, managed according to approved allotment management plans, except for the Eight Mile Allotment, which is closed to grazing. Livestock grazing will continue to be the major emphasis on the Santa Rosa Management Area. Approximately 75 percent of the suitable range is in fair or better condition. Continued range improvement projects will be necessary to maintain and increase the number of acres of rangeland in fair or better condition.

There is currently one developed campground that has a capacity of 14,145 PAOT days. It is used mostly on weekends and during hunting season. Dispersed recreation is increasing annually. There are an estimated 6,000 visitor days per year. There is a tract of three recreation residences located along Road Creek. Principal dispersed recreation activities are sightseeing, fishing, hunting, camping, picnicking and snowmobiling. The Indian Creek - Canyon Creek road corridor lies in an area of natural beauty and is managed to preserve its scenic qualities.

Wildlife is a significant resource of the management area, both culturally and economically. There is a wide variety of game and nongame wildlife species in the management area. The management area contains critical summer/fall range for mule deer which are one of the important big game species in the area.

Antelope are another important big game species on the management area. The present estimated population of antelope is about 200 animals. The primary antelope summer range includes the lower portions of the Quinn River, Wild Bill, North Fork, Martin Basin and Buttermilk allotments. Habitat is primarily low sagebrush and Wyoming big sagebrush.

Mountain lion populations have increased. This increase is reflected in harvest data collected over the last few years.

Sage grouse inhabit approximately two-thirds of the management area. The major strutting grounds are located on the northeastern part of the area. Chukar and Hungarian partridge inhabit most of the management area. Good chukar hunting has been the rule over the past several years. Quail are also present on the management area. There are plans to introduce sharp-tailed grouse in the near future.

California bighorn sheep were reintroduced on the Santa Rosa District in Eight Mile Canyon in 1978. The population has grown from 12 to 35 sheep in 1984. There are plans for another transplant in the Sawtooth Mountain area in the near future.

There are also numerous species of nongame mammals and birds throughout the management area.

Approximately 70 miles of fishable streams are scattered throughout the area. Brook, rainbow, brown and the threatened Lahontan cutthroat trout are prevalent species. There has been considerable loss of the fish habitat due to recent flooding. Efforts are being made to improve fish habitat.

The only timber resource on the management area is a small amount of aspen taken for firewood.

Water is an important resource of the management area. Nearly all resource development in the Santa Rosa Range and in the adjacent valleys is dependent upon the approximately 120,000 acre-feet of water that flows from this important watershed. Watershed conditions are relatively stable except for several drainages where land slumps and flooding during the springs of 1982 and 1983 caused considerable stream and adjacent riparian area damage. Water quality on the area is considered to be good.

Water rights applications are currently being filed on developed springs to comply with State water law. Future applications will be applied for on instream flows to protect stream channel stability and fish and wildlife habitat.

There is only one oil and gas lease on the area; interest in these resources is increasing throughout the area. Mineral prospecting and exploration activity are increasing.

There are approximately 30,146 acres of private property within the National Forest boundary. Currently landowners have shown interest in consolidating private inholdings within the National Forest boundary. There are also roads through private land that we do not have a ROW on. One private landowner has proposed several possible exchanges, mostly in the Dutch John Creek area.

There are only six special use permits on the management area.

There are four administrative sites on or in the vicinity of the management area. These are:

- Laca Camp (not withdrawn)
- Lamance (withdrawn, cancelled)
- Martin Creek
- Paradise Valley

Wildfire is a common occurrence on the management area. Both man-caused and lightning fires occur about equally. There are, on the average, over two wildfires per year. About one fourth of the fires are larger than 300 acres. They are grass and brush fires and are usually controlled after the first burning period. Access for fire suppression is poor. Between 1970 and 1980, 16 fires were recorded. Nine of these fires were man-caused and the remaining seven were lightning strikes. This represents the only management area where man-caused fires exceed lightning strikes. The largest fires occurred in 1971, 1972 and 1974. They burned 6,000, 1,600 and 2,950 acres respectively. Below normal level precipitation in the form of rain and snow, and above average temperatures may have been responsible for the fires reaching these sizes. Historically, it is common for two to three wildfires in these size classes to occur within a five-year period. These fires tend to occur on the western and southern portions of the management area.

Prescribed fire has been and is currently a significant tool for range improvement on the management area.

There are approximately 190 miles of roads and 89 miles of trails on this area. The primary access road through the area is the Canyon Creek and Indian Creek road. Many of the roads are secondary roads, receiving little use. Most trails are not maintained and they receive little use except for livestock operators and hunters. Some of the heavier used trails have been lost due to the recent flooding. There is some ORV use at present, but little damage results from this activity.

The management area has three potential historic sites. National, Buckskin and Spring City are old mining districts. There are also several archaeological sites.

Management Prescription

Recreation:

Existing developed sites will be improved and maintained. Dispersed recreation will be emphasized on the remainder of the District. Trailhead facilities will be constructed as funds become available.

Wildlife & Fish:

Habitat will be maintained with emphasis on improvement of key habitat such as winter range, fawning and brooding areas. The management indicator species will be used to monitor habitat conditions and trend. Big game summer ranges will be considered when planning for other resources. Sensitive, threatened and endangered species habitats will be managed so as to stabilize or increase their populations to a level that will lead to their delisting.

Range:

Range improvements will be maintained, constructed and reconstructed, as provided for in the individual allotment management plans. Livestock grazing will continue on the 12 allotments currently under management. Noxious weed control will continue.

Timber:

The current timber resource base, consisting of aspen, will continue to be managed as a source of personal firewood use.

Water & Soil:

Maintain water quality and soil productivity. Management activities of all resources must maintain or enhance soil and water resources and comply with applicable laws and regulations. Soil and water projects will emphasize protection, disturbed area reclamation, emergency burn rehabilitation, and increasing water yield and soil productivity. Such projects will be multifinanced. Water rights filings will be made as required by state law.

Lands:

Land exchanges, acquisitions and rights-of-ways will be used to provide public access and block up land for more efficient management.

Special Uses:

Hydro-electric power development, water and power transmission lines and other special use facilities will be allowed.

Facilities:

Forest Service administrative facilities will be maintained and new facilities constructed as needed. Old facilities possessing no historic or administrative value will be removed or disposed of.

Protection:

The level of fire protection will be commensurate with the value of the resources and facilities being protected.

Minerals:

Coordinate mineral exploration, leasing, and development with other resources. Focus will be on maintenance and preservation of recreational, visual, and watershed resources.

PRACTICES		MTH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RECREATION				
Cultural Resource Inventory, Evaluation, Nomination, Protection, Planning	A01	Inventory and evaluate known sensitive areas. Nominate and protect as appropriate. Develop plans for management alternatives.	Identify and evaluate any historical structures at Forest Service facilities which may be related to OCC era or early development of the Forest.	
	A02		Inventory and evaluate Buckskin Mill, area of Solid Silver Creek, Buttermilk Creek, Indian Creek, Mullinex Petroglyphs, and Devil's Gate rock shelter. Nominate and protect as appropriate. Develop plans to address management alternatives.	
	A03			
	A04			
ROS Management	A02	Maintain the amount of ROS semi-primitive non-motorized areas.	Allow no permanent roads except for mineral production.	
Facility and Site Construction and Reconstruction	A05	Bring the condition of developed Recreation facilities to maintenance class 1 by 2000.		
	A06			
Facility and Site Management	A07	Manage developed sites at the standard service level from July 1 to Labor Day.		
		Develop and implement developed site prescriptions to achieve and maintain desirable vegetative cover.	Complete the developed site vegetative management plan by 1990.	

Management Direction, Standards, and Guidelines for the Santa Rosa Management Area

PRACTICES	MIH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
RECREATION (Cont.)			
Facility and Site Management (Cont.)	A07	Retain existing recreation residence special use permits.	See Appendix I for modifications and alternations which are authorized.
		Manage trees in selected developed sites to minimize damage due to concentrated recreation use.	Manage aspen in Lye Creek Campground to minimize damage and to increase aspen regeneration.
Recreation Residence		Cancel the Brown's summer residence permit by 1997.	
Public Information		Provide visitor information services at the Paradise Ranger Station and Winnemucca District Office.	
Winter Use	A08	Allow snow cat skiing in approved areas.	
ORV Management		Maintain travel plan to control off-road vehicle use and provide protection for vegetation, soil, and other resources.	Vehicle travel will be prohibited in the Santa Rosa Peak area.
			The Hinkley Summit Road #1084 may be closed from November 1 to April 30 to prevent damage to road surface.
Trail System Maintenance and Operation	A12	Provide a trail system adequate for administrators, permittees, and the public.	Maintain trails to Level 3 standard.
WILDLIFE & FISH			
Structural Habitat Improvement	O03 O04	Manage California bighorn sheep winter and summer range.	Maintain closure of Eight Mile allotment to livestock grazing until it is determined that cattle and the bighorn sheep can co-exist without directly competing for forage and habitat.
			Design bighorn sheep fences in areas to minimize impacts on bighorn sheep.

Management Direction, Standards, and Guidelines for the Santa Rosa Management Area

PRACICES	MIH	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
<u>TIMBER</u>			
Timber Harvest Administration	E07	Develop a fuelwood and wood products management program for the Santa Rosa management area.	
<u>SOIL & WATER</u>			
Rights/Use Management	F07	Quantify instream flow needs by priority based on the State's adjudication schedule and proposed water developments.	
<u>LANDS</u>			
Land Acquisition	J15	Purchase land for National Forest status from willing sellers, using funds from the Nevada Receipts Act.	
<u>FACILITIES</u>			
Road Construction	L04	Complete aerial road network.	Construct and reconstruct arterial road from Laca Camp to Quinn River Canyon by 1995. The road shall be built to meet current Forest Service direction.
Road Maintenance	L19	The Forest will become actively involved with the county road programs and take the initiative in preparing road construction and maintenance agreements.	
<u>PROTECTION</u>			
Fire Prevention	P02	Develop a fire protection program directed toward reducing the number of wildfires.	Inspect all recreation residences for fire fire hazards.

G. FOREST PLAN ACTION SCHEDULES

The tables on the following pages of this chapter display projects and activities to be accomplished through the year 1996 by the Humboldt National Forest.

FOREST ACTION SCHEDULE

Recreation Construction/Reconstruction

Project Name or Description	Management Area/ District	MIH Code	Unit of Measure	86	87	88	89	90	91	92	93	94	95	96
Jack Creek Campground	Mountain City	A05	PAOTS		30									
Jack Creek Campground Water System	Mountain City	A05	PAOTS*				35							
Reconstruct Big Bend Water System	Mountain City	A05	PAOTS*							85				
Camp Draw Undeveloped Campsites	Mountain City	A05	PAOTS									2		
Replace Fire Rings In All Campgrounds (apx 50)	Mountain City	A05	PAOTS*							330				
Powderhouse Picnic Site Water System	Ruby Mountains	A05	PAOTS		50									
Changling Canyon Interpretive Trail	Ruby Mountains	A05	PAOTS	30										
Ward Mountain Toilets	Ward Mountain	A05	PAOTS		458									
Baker Creek Water System	Snake	A05	PAOTS				100							
Lehman Creek Holding Tank and Water System	Snake	A05	PAOTS							120				
Slide Creek Campground	Jarbridge	A05	PAOTS		15									
Pole Creek Campground	Jarbridge	A05	PAOTS					25						
Convert Portions of Bird Creek Picnic Area to Fee Campsites	Schell	A05	PAOTS								20			

Recreation Construction/Reconstruction

Project Name or Description	Management Area/ District	MTH Code	Unit of Measure	Output Units by Year						
				86	87	88	89	90	91	92
Lehman Creek Group Camp	Snake	A06	PAOTS			50				
Lye Creek Vault Replacement	Santa Rosa	A05	PAOTS							115
Powertown Picnic Site* Streambank Stabilization	Ruby Mountains	A07	PAOTS				89			
Thomas Canyon Campground* Streambank Stabilization	Ruby Mountains	A07	PAOTS					220		

*To be accomplished by funds and personnel outside the Forest Service.

FOREST ACTION SCHEDULE

Trailhead Construction/Reconstruction

Project Name or Description	Management Area/ District	MH Code	Unit of Measure	Output Units by Year											
				86	87	88	89	90	91	92	93	94	95	96	
Camp Draw	Mountain City	A05	Trailhead											1	
Gardner Creek*	Ruby Mountains	A11	Trailhead		1										
Deering Creek*	East Humboldts	A11	Trailhead				1								
Harder Creek*	East Humboldts	A11	Trailhead					1							
Winchell Creek*	East Humboldts	A11	Trailhead						1						
Agass Springs*	East Humboldts	A11	Trailhead							1					
Secret-Start*	East Humboldts	A11	Trailhead								1				
Overland Creek*	East Humboldts	A11	Trailhead									1			
Thorpe Creek*	East Humboldts	A11	Trailhead										1		
Harrison Pass-Ruby Crest Trail*	Ruby Mountains	A11	Trailhead											1	
Slide Creek	Jarbridge	A05	Trailhead										1		
Buffalo Creek	Santa Rosa	A05	Trailhead			1									
Able Creek	Santa Rosa	A05	Trailhead						1						
Singas Creek	Santa Rosa	A05	Trailhead							1					
Rebel Creek	Santa Rosa	A05	Trailhead									1			
Little Cottonwood	Santa Rosa	A05	Trailhead											1	
Shoshone Trailhead	Snake	A05	Trailhead										1		

*To be accomplished by funds and personnel outside the Forest Service (i.e., Prison Honor Camp Personnel)

Trails Construction/Reconstruction

Project Name or Description	Management		Unit of Measure	Output Units by Year													
	District	Area/ Code		86	87	88	89	90	91	92	93	94	95	96			
Snowmobile Trail Wildhorse to Jarbridge	Mountain City	A10/11	Miles							30							
Soldier Creek	Ruby Mountains	A10/11	Miles		3												
Soldier Creek— Griswold	Ruby Mountains	A10/11	Miles			3											
Third Boulder	East Humboldts	A10/11	Miles								3						
Fourth Boulder	East Humboldts	A10/11	Miles									3					
Pole Creek—Angel Lake	East Humboldts	A10/11	Miles													3	
Hole-in-the Mountain	East Humboldts	A10/11	Miles														3
Gardner Creek Trail No. 030*	Ruby Mountains	A10/11	Miles		7												
Cottonwood Creek Trail*	Ruby Mountains	A10/11	Miles			4											
Harder Creek Log Trail (Greys Lake)*	East Humboldts	A10/11	Miles					12									
Winchell—Agee Spring Trail No. 007	East Humboldts	A10/11	Miles						15								
Portions of Boulder Creeks Trail	East Humboldts	A10/11	Miles											6			
Buttermilk	Santa Rosa	A10/11	Miles													2	

Trails Construction/Reconstruction

Project Name or Description	Management Area/ District	MIR Order	Unit of Measure	Output Units by Year										
				85	87	88	89	90	91	92	93	94	95	96
Thorpe Creek Trail No. 035 (Verdi Lake)*	Ruby Mountains	A10/11	Miles						8					
Ruby Quartz Trail No. 029*	Ruby Mountains	A10/11	Miles							4				
Brown Creek Trail No. 110 (Pearl Lake)*	Ruby Mountains Wilderness	A10/11	Miles								5			
Trail No. 122 (Near Secret Peak Overland Lake)*	Ruby Mountains Wilderness	A10/11	Miles									6		
Rattlesnake Creek Trail No. 108	Ruby Mountains Wilderness	A10/11	Miles											7
Slide Creek	Jarbridge Wilderness	A10/11	Miles 6.5											
East Fork Mary's River	Jarbridge Wilderness	A10/11	Miles					16						
Camp Creek	Jarbridge Wilderness	A10/11	Miles								3			
Wheeler Peak Summit to North Fork Baker Creek	Bristlecone	A10/11	Miles			5								
Lewington Arch Trail (Trail No. 005)	Snake	A10/11	Miles				1							
Mt. Harish Summit Trail	Mt. Harish	A10/11	Miles							1				

*To be accomplished by funds and personnel outside of the Forest Service (i.e., Wilson Honor Camp Personnel)

FOREST ACTION SCHEDULE
Wildlife Improvements

Project Name or Description	Management Area/ District	MTH Code	Unit of Measure	Output Units by Year											
				86	87	88	89	90	91	92	93	94	95	96	
Northfork T&E Fisheries - habitat improvement project	Mountain City	001	Structures	32											
		003	Structures		32										
		004	Structures				32		32		32		32		
Harritt Creek Stream Trout stream inventory & habitat improvement	Mountain City	001	Structures	20											
		003	Structures		20										
		004	Structures				20		20	20	20	20	20	20	
Lahontan Outthroat trout stream inventory habitat improvement	Mountain City	001	Structures	10											
		003	Structures												
		004	Structures			10			10			10		10	
Maintenance of Game Ex.	Mountain City	004	Structures	2	2	2	2	2	2	2	2	2	2	2	2
Bureau Deer Winter	Mountain City	001	Inventory	1	1	1	1	1	1	1	1	1	1	1	1
Range Inventory West Independence Deer Winter Range Inventory	Mountain City	001	Inventory	1	1	1	1	1	1	1	1	1	1	1	1
Sagegrouse Habitat Inventory	Mountain City	001	Acres		3	3	3	3							
		002	Acres						2	2	2	2	2	2	2
Aspen Management Inventory and H.T.	Mountain City	001	Acres	10											
		002	Acres	2	2	2	2	2	2	10	2	2	2	2	10
Willow Planting on pit tank	Mountain City	001	Acres	5											
		002	Acres		2	2	3	1	1	1	5	1	1	1	1
Bureau River Fish Habitat Inventory	Mountain City	001	Structures		20										
		003	Structures		10	10									
		004	Structures						10		10		10		10

Wildlife Improvements

Project Name or Description	Management Area/ District	MNH Code	Unit of Measure	Output Units by Year											
				86	87	88	89	90	91	92	93	94	95	96	
Cobb Creek & Line Creek Fish Habitat Improvement	Mountain City	001	Structures	20											
		003	Structures					20							
		004	Structures						20		20			20	
Hogatory Management	Mountain City	001	Acres	200											
		002	Acres	20	20	20	20	20	20	20	20	20	20	20	20
Martin Creek Fish Habitat Improvement	Mountain City	001	Structures	3				3		3		3		3	
Cooper Creek Fish Habitat Improvement	Mountain City	001	Structures	4											
		003	Structures					4							
		004	Structures									4		4	
Waterfowl Habitat Inventory and Enhancement	Mountain City	001	Acres	1	1	1									
Shanty Town Rehabilitation	Ruby Mountains	002	Acres		100	100	100	100	100	100					
Riparian Structure Maintenance	Ruby Mountains	004	Acres		5	5	6	6	6	6	6	6	6	6	6
Peregrine Falcon Coordination W/USFWS	Ruby Mountains	001	\$		1000	1000	1000	1000	1000	1000					
Lee/Walch Stream Structures	Ruby Mountains	003	Structures		1	3	3	3			10		10		10
		004	Structures												
Rockhouse Rehabilitation	Ruby Mountains	001	Acres		200	200									
		002	Acres				200	100	100						

Wildlife Improvements

Project Name or Description	Management Area/ District	MNH Code	Unit of Measure	Output Units by Year												
				86	87	88	89	90	91	92	93	94	95	96		
Crocker Johnson/ Narcisse Whip Outting	Ruby Mountains	002	Acres	5000												
Carville Creek Stream Structures	Ruby Mountains	001 003	Structures			15	7	8								
Road Canyon Riparian Structures	Ruby Mountains	003 004	Structures			1		1		1		1		1		
Lindsey/Brown Riparian Structures	Ruby Mountains	001 003 004	Structures					1		1		1		1		
Willow Spring	Ruby Mountains	003 004	Structures						1		1		1			
Gilbert Creek	Ruby Mountains	001	Structures													
Holvertan Riparian Structure 5 Acre Fencing	East Humboldt	003 004	Structures		1											
Riparian Structure Maintenance	East Humboldt	004	Structures		4	5	6	6	6	6	6	6	6	6		
Arizona Spring Structure	East Humboldt	003 004	Structures			1										
Trout Creek Stream Structure	East Humboldt	001	Structures					3	7							
Stream Inventory Coop W/EDOW	Jarbridge	001	Miles		100	100										
Monitoring - Sagebrush Management, Aspen Trt., Photo pts. in Riparian Areas	Jarbridge	001	Acres		100	100	100	100	100	100	100	100	100	100		

Wildlife Improvements

Project Name or Description	Management Area/ District	MNH Code	Unit of Measure	Output Units by Year												
				86	87	88	89	90	91	92	93	94	95	96		
Develop & Implement Sagebrush Management Strategy coop w/Range	Jarbridge	C01 & C02	Acres		80	80	80	30	30							
Maintain Wildlife Enclosures	Jarbridge	C04	Acres		8	8	8	8	8	8	8	8	8	8		
Leontien Outthroat Develop Water out of Mary's River	Jarbridge	C03	Structures	1												
Aspen Management & Inventory	Jarbridge	C01 C02	Acres Acres	3		3	5	2	2							
Maintain pipelines in Rest Unit for Antelope	Jarbridge	C04	Structures	7	7	7	7	7	7	7	7	7	7	7		
Stream Improvement Inventory district-wide	Jarbridge	C01	Inventory			1	1									
Willow Plantin 1/2 mi. Pole Creek Identify Other Areas	Jarbridge	C01 C02	Miles Miles	0.5	0.5	0.5	0.5	0.5	0.5	0.5						
Inventory & Modify Range Fences to Wildlife Specs	Jarbridge	C01 & C04	Structures	1	1	2	2									

Wildlife Improvements

Project Name or Description	Management Area/ District	MNH Code	Unit of Measure	Output Units by Year										
				86	87	88	89	90	91	92	93	94	95	96
Remove Troughs from Meadows & Relocate	Jarbridge	004	Structures			3		2						
Spring & Meadow Rehabilitation	Jarbridge	001 002	Acres Acres		9			6						
Inventory & Project id.						9								
Rejuvenate Decadent Petr (Bull Camp 20 ac) Identify Other Areas	Jarbridge	001 & 002	Acres					20						
Fence Ponds at Bull Camp - Pipe Water to Trough	Jarbridge	003 004	Structures Structures					2		2	2	2	2	2
Attempt to Acquire Robinson Hole (160 ac) Winter Range	Jarbridge	001	Acres					80	80					
Spray Iris & Arwl Lime Creek, Wrangle Mtn. Bull Camp	Jarbridge	001 002	Acres Acres		10									
Sagebrush Burning	Jarbridge	002	Acres		50		50	50			50			
Buck Creek Allotment Release vegetation; selec- tively cut white fir invading aspen stands	Schell	002	Acres				30							
Fish studies; surveys; determine fish habitat improvement needs	Schell	001	Reports		1									

Wildlife Improvements

Project Name or Description	Management Area/ District	MIF Code	Unit of Measure	Output Units by Year										
				86	87	88	89	90	91	92	93	94	95	96
Wildlife Studies; determine feasibility of introducing peregrine falcon into Cave Lake area	Schell	001	Reports						1					
Modify Forest boundary fence from Cave Lake road to allow elk easy passage (in coop w/Range total 5 miles)	Schell	003	Structures					3			2			
Release vegetation through P-J thinning	Schell	003	Acres				100	100	100					
Non-structural wildlife habitat improvement; willow planting along Hardy's Creek	Moriah	003	Acres		5									
Fish cover development; pool structures in Hampton Creek	Moriah	003	Structures		3									
Stream flow structure maintenance; Hampton Creek	Moriah	003	Structures			3			3				3	

Wildlife Improvements

Project Name or Description	Management Area/ District	MTH Code	Unit of Measure	Output Units by Year											
				86	87	88	89	90	91	92	93	94	95	96	
Wildlife studies, surveys; determine feasibility of re-introducing elk into the south end of Snake Range	Snake	001	Reports		1										
Openings, edges treatment, thin piñon/juniper	Snake	002	Acres		10	10	10	10	10						
Fish cover development; pool structures in Pine and Ridge Creeks	Snake	003	Structures		20										
Water development maintenance; Cedar Cabin Spring	Snake	004	Structures						1						
Stream flow structure maintenance; Pine and Ridge Creeks	Snake	004	Structures			10	10						10	10	
Water development; construct reservoirs in Sammill Canyon	Ward	003	Structures			4									
Water development maintenance; reservoirs in Sammill Canyon	Ward	004	Structures									4			
Water development; construct reservoirs in Dead Horse wash	Ward	003	Structures		3										
Water development maintenance; reservoirs in Dead Horse Wash	Ward	004	Structures											3	

Wildlife Improvements

Project Name or Description	Management Area/ District	MNH Code	Unit of Measure	Output Units by Year											
				86	87	88	89	90	91	92	93	94	95	96	
Openings, edges treat- ment; thin pinyon/juniper in Sawmill Canyon/Blackrock Spring areas	Ward	002	Acres		20	20	20	20	20	20					
Openings, edges treat- ment; thin pinyon/juniper between Holt Creek and Gubler Canyon	Ward	002	Acres		20	20	20	20	20	20					
Survey and report on stream habitat improvement projects in Illipah Creek	White Pine	001	Reports		1										
Structural fish habitat improvement; channel stabilization in Illipah and Cottonwood Creeks	White Pine	003	Structures				20	10							
Non-structural wildlife habitat improvement; willow plantings along Illipah Creek	White Pine	002	Acres			5									
Channel stabilization structure maintenance; Illipah, Cottonwood Creeks	White Pine	004	Structures											20	10
Channel stabilization construction, headcut structures in Illipah/ Cottonwood creeks	White Pine	003	Structures			1	1	1							

Wildlife Improvements

Project Name or Description	Management		MNH Code	Unit of Measure	Output Units by Year												
	Area/ District				86	87	88	89	90	91	92	93	94	95	96		
Channel stabilization construction maintenance; maintain headout control structures in Illipah/ Cottonwood Creeks	White Pine		004	Structures					3								
Management fencing con- struction; meadow enclosures	White Pine		003	Structures		1	1	1	1	1							
Management fencing main- tenance; meadow enclosures	White Pine		004	Structures		25	26	27	28	29	30	30	30	30	30	30	30
Non-structural wild- life habitat improvement; willow plantings along Big Creek	Quinn		002	Acres		5											
Water development; construct reservoirs between Currant Summit and Horsetrack Spring	White Pine		003	Structures		5											
Water development main- tenance; reservoirs be- tween Currant Summit and Horsetrack Spring	White Pine		004	Structures						6							
Wildlife studies; prepare Quinn required reports for augmentation of Desert bighorn sheep herd on Grant Range	Quinn		001	Reports	1												
Wildlife studies, surveys; determine feasibility of reintro- ducing Desert bighorn sheep into Quinn Canyon Range	Quinn		001	Reports		1											

Wildlife Improvements

Project Name or Description	Management Area/ District	MNH Code	Unit of Measure	Output Units by Year											
				86	87	88	89	90	91	92	93	94	95	96	
Wildlife studies, surveys; inventory seasonal use patterns, migration corridors, and identify needs for improvement of Desert bighorn habitat	Quinn	C01	Reports		1	1	1	1	1						
Management fencing construction; 2 miles near Little Meadows in coop. w/BLM and Range	Quinn	C03	Structures				4								
Management fencing maintenance; Little Meadows (2 miles)	Quinn	C04	Structures				4	4	4	4	4	4	4	4	
Prune vegetation; cliffrose on Scofield bench	Quinn	C02	Acres		50	50	50	50	50	50					
Cooperative technical assistance; provide input into district's wood products program to enhance wildlife habitat	Ely R.D.	C01	Acres	35	35	35	35	35	35	35	35	35	35	35	
Update season distribution maps for wildlife with emphasis on Key Indicator Species	Ely R.D.	C01	Reports	1	1	1	1	1	1						
Water Dev. Maint. on timber and summer spurs. for Desert bighorn sheep	Grant	C04	Structures										2		

Wildlife Improvements

Project Name or Description	Management Area/ District	MNH Code	Unit of Measure	Output Units by Year										
				86	87	88	89	90	91	92	93	94	95	96
Bitterwild Meadows Enclosure	Santa Rosa	003 004	Structures Structures		1		1	1	1		1		1	
Bighorn sheep salting	Santa Rosa	002	Acres	12000		12000	12000	12000	12000	12000			12000	
Long Canyon Quizzler Maintenance	Santa Rosa	004	Structures		1		1	1	1		1		1	
Maintenance of Existing Structures	Santa Rosa	004	Structures		5	5	5	5	5	5	5	5	5	5
Quinn Canyon Quizzler	Santa Rosa	003 004	Structures Structures		1		1	1	1		1		1	
Stream Habitat Inventory	Santa Rosa	001	Miles	150			10		10					
Quinn Stream Monitoring	Santa Rosa	001	Studies				1	1	1					
Long Canyon Stream Monitoring	Santa Rosa	001	Studies				1	1	1					
Dutch John Stream Monitoring	Santa Rosa	001	Studies				1	1	1					
Deer Winter Range Survey	Santa Rosa	001	Studies		1	1	1							
Riparian Habitat Enclosures	Santa Rosa	001 003 004	Structures Structures Structures		2	3	2	3	3	5	5	5	5	
Stream Rehab. Study	Santa Rosa	001 003 004	Structures Structures Structures		25	25	25	25	25	25	25	25	25	25

Wildlife Improvements

Project Name or Description	Management Area/ District	MNH Code	Unit of Measure	Output Units by Year											
				86	87	88	89	90	91	92	93	94	95	96	
Bighorn sheep reintroduction	Santa Rosa	001	\$				200	200	200						
Deer Winter Range Improvement	Santa Rosa	001	Acres		200	200									
		002	Acres				200	200							
Bitterbrush regeneration	Santa Rosa	001	Acres		15	15	15	15							
		002	Acres												
Stream structures & bank stabilization	Santa Rosa	001	Structures		40	20	30	30	60		60		60		
		003	Structures												
		004	Structures												
Riparian Habitat Improvement	Santa Rosa	001	Structures		15	15	15	15		15	15	15	15	15	
		003	Structures												
		004	Structures												
Sagegrouse Inventory	Santa Rosa	001				1	1								
Long Canyon Stream Structures (instream)	Santa Rosa	004	Structures		8	8		8							
Long Canyon Pipeline Guzzler	Santa Rosa	001	Structures		1										
		003	Structures			1									
		004	Structures						1						
Aspen Management	Santa Rosa	001	Acres			10	10	10	10						
		002	Acres												
Mountain Mahogany Management	Santa Rosa	001	Acres				10	10							
		002	Acres						20						
Wildlife studies - determine availability of sites for sharp- tailed grouse reintroduction	Santa Rosa	001	Reports				1	1	1						

Wildlife Improvements

Project Name or Description	Management Area/ District	MTH Code	Unit of Measure	Output Units by Year										
				86	87	88	89	90	91	92	93	94	95	96
Seed Collection & Propagation	Santa Rosa	002	No Unit of Measure											
Wildlife Studies - determine suitability of introducing ruffed grouse	Santa Rosa	001	Reports	1	1	1	1	1	1					
Peregrine Falcon Introduction (Coop. w/USFWS)	Santa Rosa	001	\$				200	500	1000					
Waterfowl ponds	Santa Rosa	001 003	Structures Structures				3	2						5

FOREST ACTION SCHEDULE
Range Improvements

Project Name or Description	Management Area/ District	MTH Code	Unit of Measure	Output Units by Year												
				86	87	88	89	90	91	92	93	94	95	96		
Water Development- Through SAG Allotments Construction and Reconstruction	Mountain City	D05	Structures	2	2	2	2	0	0	2	0	2	1	1		
Water Development Through C&H Allotments- Construction and Reconstruction	Mountain City	D05	Structures	14	11	10	10	11	14	3	14	10	14	10		
Pipeline Construction and Reconstruction	Mountain City	D05	Miles	0	0	0	2	1	0	0	1	0	2	0		
Cattleguard-Install and Replace	Mountain City	D05	Structures	0	0	0	0	0	0	2	1	2	2	2		
Horizontal Walls	Mountain City	D05	Structures	5	5	5	5	5	5	5	5	5	5	5		
Fence Construction and Replacement	Mountain City	D05	Miles	6	9	9	5	11	9	10	8	10	10	10		
Pit Tanks and Reservoirs	Mountain City	D05	Structures	0	15	0	0	0	15	0	0	10	0	10		
Quizzlers	Mountain City	D05	Structures	0	0	0	0	1	2	0	1	0	0	1		
Sagebrush/Wyethia Treatment	Mountain City	D03	Acres	0	0	0	600	0	0	0	0	0	0	0		
Vegetative Manipulation	Mountain City	D03	Acres	0	150	300	150	150	50	50	50	50	100	50		
Noxious Weed Control	Mountain City	D03	Acres	15	15	15	15	15	15	15	15	15	15	15		
Horse Creek C&H Wyethia Treatment	East Humboldt	D03	Acres												170	

Range Improvements

Project Name or Description	Management		Unit of Measure	Output Units by Year												
	District	MH Code		86	87	88	89	90	91	92	93	94	95	96		
Belmont C&H Wyethia Treatment	Ruby Mountains	D03	Acres			80										
North Ruby C&H Sagebrush Treatment	Ruby Mountains	D03	Acres				500									
Carville Creek C&H Sagebrush and Wyethia Treatment	Ruby Mountains	D03	Acres						350							
Overland C&H Sagebrush Treatment	Ruby Mountains	D03	Acres							200						
Lindsay-Brown C&H Sagebrush Treatment	Ruby Mountains	D03	Acres								100					
South Ruby C&H Sagebrush Treatment	Ruby Mountains	D03	Acres									100				
Smith Creek C&H Sagebrush Treatment	Ruby Mountains	D03	Acres										200			
Wild Horse Territory P-J Chaining and Seeding	Ruby Mountains	D03	Acres											500		
Water Troughs	East Humboldt	D05	Structures	3	2			1	1	1	1	1	1	1		
Water Troughs	Ruby Mountains	D05	Structures			5	5	5	6	5	5	5	5	5		
Cherry Springs Water System Troughs and at Least 5 Miles Pipeline	Ruby Mountains	D05	Structures	1												

Range Improvements

Project Name or Description	Management Area/ District	MNH Code	Unit of Measure	Output Units by Year											
				86	87	88	89	90	91	92	93	94	95	96	
Pit Tanks	East Humboltdts	D05	Structures				2								
Pit Tanks	Ruby Mountains	D05	Structures		2	2	4				4			4	
Carville Creek Water System 2 Miles Pipeline & Troughs	Ruby Mountains	D05	Structures			1									
Cave Creek C&H Water System 2 Miles Pipeline & Troughs	Ruby Mountains	D05	Structures					1							
Sherman Creek Water System 4 Miles Pipeline & Troughs	Ruby Mountains	D05	Structures						1						
School Creek Water System 3 Miles Pipeline & Troughs	Ruby Mountains	D05	Structures							1					
Smith Creek Water System 5 Miles Pipeline & Troughs	Ruby Mountains	D05	Structures								1				
Cattleguards	East Humboltdts	D05	Structures		1	1									
Cattleguards	Ruby Mountains	D05	Structures		1	1	2	2	1	2	2	2	2	2	2

Range Improvements

Project Name or Description	Management Area/ District	MH Code	Unit of Measure	Output Units by Year												
				86	87	88	89	90	91	92	93	94	95	96		
Fences	East Humboldt	D05	Miles		4		1	1				1				
Fences	Ruby Mountains	D05	Miles	5	2		2	2	3	3	4	2	4			
Trails	East Humboldt	D05	Miles				1	1			1	1				
Trails	Ruby Mountains	D05	Miles		1					1						
Noxious Weed Control	East Humboldt	D05	Acres	20	20	20	20	20	20	20	20	20	20	20		
Noxious Weed Control	Ruby Mountains	D05	Acres	40	40	40	40	40	40	40	40	40	40	40		
Sheep Trough	Jarbridge	D05	Structures	1		1	1	1	1	1	1					
Pipeline & Trough	Jarbridge	D05	Structures	2	1	4	3	2	1	1	1	2	2			
Horizontal Well	Jarbridge	D05	Structures		1		1			2	2					
Pit Tanks	Jarbridge	D05	Structures	4	3	3	2	5	5	5	5	5	5	10		
Cattle Trail	Jarbridge	D05	Miles											1		
Vegetation Treatment	Jarbridge	D03	Acres	400	400	230	600	600	482	482	482	482	482	650		

Fence Improvements

Project Name or Description	Management Area/ District	MH Code	Unit of Measure	Output Units by Year											
				86	87	88	89	90	91	92	93	94	95	96	
Noxious Weed Control	Jarbridge	D03	Acres	4	4	4	6	6	6	6	6	6	6	6	2.5
Poisonous Plant Control	Jarbridge	D03	Acres	22.4	22.4	24	24	24	24	24	24	24	24	24	24
4-Wire Fence	Jarbridge	D05	Miles	3	5	9	3	5	7	7	7	7	7	5	5
3-Wire Fence	Jarbridge	D05	Miles	5											2
Let-Down Fence	Jarbridge	D05	Miles												
Cattleguard	Jarbridge	D05	Structures			2		1	1	1	1				
Holding Corral	Jarbridge	D05	Structures						1				1		
Cattle Trough	Jarbridge	D05	Structures	4	2	3	2	2	2	2	2	2	2	2	2

Ridge Improvements

Project Name or Description	Management Area/ District	MH Code	Unit of Measure	Output Units by Year										
				86	87	88	89	90	91	92	93	94	95	96
Cattle Trough	Ward	D05	Structure						1					
Sheep Trough	Ward	D05	Structure							3				
Cattle Trough	White Pine	D05	Structure		1	1		1			1	2	2	
Boundary Fence	White Pine	D05	Mile						4					
Pipeline	White Pine	D05	Mile			8				2				
Vegetative Manipulation	White Pine	D03	Acre				1500			2				
Freeland Canyon Road Construction	White Pine	L13	Mile					1						
Horizontal Well	White Pine	D05	Structure						2					
Forest Boundary Fence	Quinn	D05	Mile										1	
Boundary Fence	Quinn	D05	Mile	1.5	1	2								
Drift Fence	Quinn	D05	Mile			.5					2			
Cattle Trough	Quinn	D05	Structure		2	3					1	2	3	
Cherry Creek Summit Cattleguard	Quinn	D05	Structure	1										

Range Improvements

Project Name or Description	Management Area/ District	MIH Code	Unit of Measure	Output Units by Year										
				86	87	88	89	90	91	92	93	94	95	96
Goat Ranch Spring Cattleguard	Quinn	D05	Structure	1										
Pipeline	Quinn	D05	Mile	2										
Horizontal Well	Quinn	D05	Structure										1	
Division Fence	Snake	D05	Mile				1							
Drift Fence	Snake	D05	Mile							1				
Boundary Fence	Snake	D05	Mile	1					1	1	1			
Cattle Trough	Snake	D05	Structure			2	1	1		1	1			
Vegetative Manipulation Snake	Snake	D03	Acre					50				300		
Pipeline	Snake	D05	Mile										1	
Sheep Trough	Snake	D05	Structure		1		1							
Drift Fence	Marish	D05	Mile										.5	
Cattle Trough	Marish	D05	Structure	1										
Vegetative Manipulation Marish	Marish	D03	Acre			300			50	300				
Sheep Trough	Schell	D05	Structure	1	1	1	1	1	1	2				

Range Improvements

Project Name or Description	Management Area/ District	MIH Code	Unit of Measure	Output Units by Year												
				86	87	88	89	90	91	92	93	94	95	96		
Pipeline	Schell	D05	Structure			1	1	.25								
Cattle Trough	Schell	D05	Structure	1	1	1	1	1					1			
McCurdy Creek Cattleguard	Schell	D05	Structure								1					
Boundary Fence	Schell	D05	Mile			3		3			3	3				
Noxious Weed	Schell	D03	Acre		2		5									
Vegetative Manipulation	Schell	D03	Acre						50	100	50					
Pit Tank	Schell	D05	Structure			1										
Prescribed Burn	Santa Rosa	D03	Acres	150	150	200	200	100		200	200	200	300			
Drill Seed	Santa Rosa	D03	Acres			200	200						200			
Fence	Santa Rosa	D05	Miles	2.25	1			5	6	4	2			2		
Aerial Spray	Santa Rosa	D03	Acres			400	600		800	600		600				
Noxious Weed Control	Santa Rosa	D03	Acres	6	5	4	3	3	3	3	3	3	3	3		
Cattle Troughs	Santa Rosa	D05	Structures	2	2		5			5	4	4				
Pit Tanks	Santa Rosa	D05	Structures		2								2	2		
Fence Removal	Santa Rosa	D05	Miles	.25	.25	1.5		3						2		
Stock Trail Construction	Santa Rosa	D05	Miles			2					8	2				

FOREST ACTION SCHEDULE
Wild Horse Management

Project Name or Description	Management Area/ District	MTH Code	Unit of Measure	Output Units by Year						
				86	87	88	89	90	91	92
Monte Cristo MHT Roundup	White Pine	W96	Animals	25			25			50
										93
										94
										95
										96

FOREST ACTION SCHEDULE
Woodland Products

Project Name or Description	Management Area/ District	MNH Code	Unit of Measure	Output Units by Year											
				86	87	88	89	90	91	92	93	94	95	96	
Tree Planting	Mountain City	E04	Acres	50	50	50									
Fuelwood Sales	Mountain City	E07	Permits	50	50	50	50	50	50	50	50	50	50	50	50
Christmas Tree Sale Preparation	Jarbridge	E06	Trees	60	60	120	120	120	120	120	120	120	120	120	150
Christmas Tree Sale Administration	Jarbridge	E07	Trees	40	40	80	80	80	80	80	80	80	80	80	100
Fuelwood Sales and Administration	Jarbridge	E07	Permits	100	100	100	110	110	115	115	115	115	115	115	115
Pine Nut Sale Prepara- tion and Administration	Snake	E07	Sales	2					1	1					
Fuelwood and Post Timber Harvest Sale Preparation and Administration	Ely R.D.	E07 & E06	Permits	450	450	450	450	450	450	450	450	450	450	450	450
Christmas Tree Sales Preparation and Administration for Private and Commercial Use	Ely R.D.	E07 & E06	Sales	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Timber Stand Improvement Release and Weeding	Ely R.D.	E05	Acres	25	25	25	25	25	25	25	25	25	25	25	25
Pine Nut Sales Preparation and Administration	Ely R.D.	E07 & E06	Sales	21	21	21	21	21	21	21	21	21	21	21	21
Christmas Tree Sales and Administration	Ruby Mountains	E07	Trees	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Fuelwood and Post Sales Administration	Ruby Mountains	E07	Permits	400	400	400	400	400	400	400	400	400	400	400	400



FOREST ACTION SCHEDULE
Woodland Products

Project Name or Description	Management Area/ District	MFH Code	Unit of Measure	86	87	88	89	90	91	92	93	94	95	96
Tree Planting	Mountain City	ED4	Acres	50	50	50								
Fuelwood Sales	Mountain City	ED7	Permits	50	50	50	50	50	50	50	50	50	50	50
Christmas Tree Sale Preparation	Jarbridge	ED6	Trees	60	60	120	120	120	120	120	120	120	120	150
Christmas Tree Sale Administration	Jarbridge	ED7	Trees	40	40	80	80	80	80	80	80	80	80	100
Fuelwood Sales and Administration	Jarbridge	ED7	Permits	100	100	100	110	110	115	115	115	115	115	115
Pine Nut Sale Prepara- tion and Administration	Snake	ED7	Sales	2					1	1				
Fuelwood and Post Timber Harvest Sale Preparation and Administration	Ely R.D.	ED7 & ED6	Permits	450	450	450	450	450	450	450	450	450	450	450
Christmas Tree Sales Preparation and Administration for Private and Commercial Use	Ely R.D.	ED7 & ED6	Sales	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Timber Stand Improvement Release and Weeding	Ely R.D.	ED6	Acres	25	25	25	25	25	25	25	25	25	25	25
Pine Nut Sales Preparation and Administration	Ely R.D.	ED7 & ED6	Sales	21	21	21	21	21	21	21	21	21	21	21
Christmas Tree Sales and Administration	Ruby Mountains	ED7	Trees	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Fuelwood and Post Sales Administration	Ruby Mountains	ED7	Permits	400	400	400	400	400	400	400	400	400	400	400

Woodland Products

Project Name or Description	Management Area/ District	MH Code	Unit of Measure	Output Units by Year										
				86	87	88	89	90	91	92	93	94	95	96
Fuelwood and Post Sales Administration	East Humboldt	B07	Permits	50	50	50	50	50	50	50	50	50	50	50
Free Use Administration	East Humboldt	B07	Permits	50	50	50	50	50	50	50	50	50	50	50
Fuelwood Sales & Administration	Santa Rosa	B07	Permits	40	40	50	50	50	60	60	60	60	60	60

FOREST ACTION SCHEDULE
Watershed Improvement Projects

Project Name or Description	Management Area/ District	MNH Code	Unit of Measure	Output Units by Year												
				86	87	88	89	90	91	92	93	94	95	96		
Maintenance of Projects	Santa Rosa	F08	Structure	2	2	2	2	3	3	4	4	5	5	6		
Adjudications	Santa Rosa	F07	Adj.	1		1		1		1	1		1			
Small Gabions	Santa Rosa	F03	Structure				1		1		1		1			
Gully Plugs/ Check Dams	Santa Rosa	F03	Projects		3		3	3	3		3		3			
Obliterate Roads	Santa Rosa	F03	Miles				1				1					
Stream Stabilization	Santa Rosa	F03	Projects			1		1		1		1		1		
Riparian Protection (enclosures)	Santa Rosa	F03	Acres		1		1		1		1		1			
Mining Road Rehabilitation	Mountain City	265	Acres	3	3	3	3	3	3	3	3	3	3	3		
Stream Crossings	Mountain City	L18	Structures	2	2	2	2	2	2	2	2	2	2	2		
Gully Plugs and Check Dams	Mountain City	F03	Projects	3	3	3	3	3	3	3	3	3	3	3		
Watershed Protection Closures	Ruby Mountains	F03	Acres				1				1					
Stream Stabilization	Ruby Mountains	F03	Projects			1			1			1				
Watershed Protection Closures	East Humboldt	F03	Acres										1			
Stream Stabilization	East Humboldt	F03	Projects												1	
Watershed Condition Improvement	Jarvis	F03	Acres		11											

FOREST ACTION SCHEDULE
Watershed Improvement Projects

Project Name or Description	Management Area/ District	MIH Code	Unit of Measure	Output Units by Year												
				86	87	88	89	90	91	92	93	94	95	96		
Clover Valley Adjudication (1)*	East Humboldts	F07	Adjudica- tions		1											
Ruby Valley Adjudication (2)*	Ruby Mountains	F07	Adjudica- tions				1									
Spring Valley Adjudication (3)*	Schell	F07	Adjudica- tions							1						

*Indicates the priority of the adjudication on the Forest. One is the highest priority.

FOREST ACTION SCHEDULE
Minerals

Project Name or Description	Management		Unit of Measure	Output Units by Year											
	Area/ District	MTH Code		86	87	88	89	90	91	92	93	94	95	96	
Processing of Exploration Proposals	Ruby Mountains	003	Cases	3	3	3	3	3	3	3	3	3	3	3	
	East Humboldt	003	Cases	2	2	2	2	2	2	2	2	2	2	2	
	Quinn	003	Cases	3	4	3	3	3	3	4	3	3	3	3	
	Grant Rec. Wilderness	003	Cases	0	0	0	0	0	0	0	0	0	0	0	
	White Pine	003	Cases	11	11	11	11	11	10	11	11	11	10	10	
	Bristlecone Recommended Wilderness	003	Cases	0	0	0	0	0	0	0	0	0	0	0	
	Snake	003	Cases	2	3	2	2	2	2	3	2	2	2	2	
	Mojah Rec. Wilderness	003	Cases	0	0	0	0	0	0	0	0	0	0	0	
	Mojah	003	Cases	4	3	3	3	3	4	3	3	3	3	3	
	Ward	003	Cases	0	0	1	0	1	2	2	2	2	3	3	
Schell	003	Cases	5	5	6	6	5	5	6	5	5	5	5		
Mountain City	003	Cases	40	42	44	46	40	50	50	50	50	50	50		
Jarbridge	003	Cases	8	8	8	8	8	8	8	8	8	8	8		
Santa Rosa	003	Cases	3	3	3	3	3	3	4	5	5	6	6		

Minerals

Project Name or Description	Management Area/ District	MH Code	Unit of Measure	Output Units by Year										
				86	87	88	89	90	91	92	93	94	95	96
Processing of Lease Applications	Ruby Mountains	004	Leases	6	6	6	6	6	6	6	6	6	6	6
	East Humboldt	004	Leases	3	3	3	3	3	3	3	3	3	3	3
	Quinn	004	Leases	8	8	8	8	8	8	8	8	8	8	8
	Grant Rec. Wilderness	004	Leases	0	0	0	0	0	0	0	0	0	0	0
	White Pine	004	Leases	30	31	31	31	30	30	31	30	30	30	30
	Bristlecone Recommended Wilderness	004	Leases	0	0	0	0	0	0	0	0	0	0	0
	Snake	004	Leases	4	4	4	4	4	4	4	4	4	4	4
	Marijah Rec. Wilderness	004	Leases	0	0	0	0	0	0	0	0	0	0	0
	Marijah	004	Leases	1	1	1	1	1	1	1	1	1	1	1
	Ward	004	Leases	1	1	1	1	1	1	1	1	1	1	1
	Schell	004	Leases	5	5	5	5	5	5	5	5	5	5	5
	Mountain City	004	Leases	7	8	8	9	9	2	2	2	2	2	2

Minerals

Project Name or Description	Management Area/ District	MNH Code	Unit of Measure	Output Units by Year											
				86	87	88	89	90	91	92	93	94	95	96	
Processing of Site-Specific Development Proposals	Quinn	005	Plans	3	3	3	3	3	3	3	3	3	3	3	3
	Grant Rec. Wilderness	005	Plans	0	0	0	0	0	0	0	0	0	0	0	0
	White Pine	005	Plans	8	8	8	8	8	8	8	8	8	8	8	8
	Bristlecone Recommended Wilderness	005	Plans	0	0	0	0	0	0	0	0	0	0	0	0
	Mountain City	005	Plans	3	4	4	4	4	4	4	4	4	4	4	4
	Snake	005	Plans	2	2	2	2	2	2	2	2	2	2	2	2
	Mariyah Rec. Wilderness	005	Plans	0	0	0	0	0	0	0	0	0	0	0	0
Mariyah	005	Plans	1	1	1	1	1	1	1	1	1	1	1	1	
Ward	005	Plans	1	1	1	1	1	1	1	1	1	1	1	1	1
Schell	005	Plans	5	5	5	5	5	5	5	5	5	5	5	5	5
Santa Rosa	005	Plans						1			1			1	

Minerals

Project Name or Description	Management Area/ District	MNH Code	Unit of Measure	Output Units by Year											
				86	87	88	89	90	91	92	93	94	95	96	
Administration of Operations	Ruby Mountains	006	Plans	5	5	5	5	5	5	5	5	5	5	5	5
	East Humboldt	006	Plans	1	1	1	1	1	1	1	1	1	1	1	1
	Quinn	006	Plans	5	5	6	6	5	5	5	6	6	5		
	Grant Rec. Wilderness	006	Plans	0	0	0	0	0	0	0	0	0	0	0	0
	White Pine	006	Plans	22	22	22	22	22	22	22	22	22	22	22	22
	Bristlecone Recommended Wilderness	006	Plans	0	0	0	0	0	0	0	0	0	0	0	0
	Snake	006	Plans	4	3	3	4	3	4	3	3	3	3	3	3
	Moriah Rec. Wilderness	006	Plans	0	0	0	0	0	0	0	0	0	0	0	0
	Moriah	006	Plans	3	3	4	3	4	3	3	4	3	4		
	Ward	006	Plans	1	1	1	1	1	1	1	1	1	1	1	1
	Schell	006	Plans	8	8	7	8	7	8	7	7	7	7	7	7
	Mountain City	006	Plans	75	74	73	72	71	70	70	70	70	70	70	70
Jarvis	006	Plans	10	10	10	10	10	10	10	10	10	10	10	10	
Santa Rosa	006	Plans	3	3	3	3	4	4	6	6	7	7	6	6	

FOREST ACTION SCHEDULE
Land Adjustments

Project Name or Description	Management Area/ District	MTH Code	Unit of Measure	Output Units by Year										
				86	87	88	89	90	91	92	93	94	95	96
El Tejón	Schell	J15	Acres						800					
Uvalde	Quinn	J13	Acres					1						
S&H Ranches	Schell	J15	Acres							1,324				
Reed Robinson	Schell	J15	Acres								40			
Uvalde	Schell	J15	Acres									120		
Stewart	Santa Rosa	J15	Acres					800					1000	

FOREST ACTION SCHEDULE
Non Timber Rights-of-Way

Project Name or Description	Management Area/ District	MTH Code	Unit of Measure	86	87	88	89	Output Units by Year						
								90	91	92	93	94	95	96
Deering Creek	East Humboldts	J18	ROW		1									
Harder Creek	East Humboldts	J18	ROW		1									
Agee Spring	East Humboldts	J18	ROW							1				
Thorpe Creek	Ruby Mountains	J18	ROW			1								
Soldier Creek	Ruby Mountains	J18	ROW			1								
Rattlesnake Creek	Ruby Mountains	J18	ROW				4							
Griswold Creek	Ruby Mountains	J18	ROW					1						
Jobilly Creek	Ruby Mountains	J18	ROW						1					
Overland Creek	Ruby Mountains	J18	ROW								1			
Wines Creek	Ruby Mountains	J18	ROW									1		
Mose Creek	Ruby Mountains	J18	ROW										1	
McInteehan - Gilbert Creek	Ruby Mountains	J18	ROW											1
Ogleberry	Snake	J18	ROW											1
Buffalo	Santa Rosa	J18	ROW											1

FOREST ACTION SCHEDULE
Facilities Construction

Project Name or Description	Management Area/ District	MTH Code	Unit of Measure	Output Units by Year										
				86	87	88	89	90	91	92	93	94	95	96
Duplex #2	Mountain City	L24	Project	1										
Warehouse	Mountain City	L24	Project		1									
Trailer Pad	Mountain City	L24	Project		1									
Water System	Mountain City	L46	Project		1									
Dwelling	Mountain City	L24	Project								1			
Building	Mountain City	L24	Project											1
Wells Warehouse	Ruby Mountains	L24	Project			1								
Ruby Guard Station Water System	Ruby Mountains	L46	System			1								
Harrison Guard Station Water System	Ruby Mountains	L46	System				1							
Pete Holm Water System	Ruby Mountains	L46	System					1						
Unassigned Projects	Ruby Mountains	L24	Project				1							
Unassigned Projects	Ely	L46	System								1			
Unassigned Projects	Santa Rosa	L24	Projects								1			
Unassigned Projects	Santa Rosa	L46	Projects											1

Facilities Construction

Project Name or Description	Management Area/ District	MTH Code	Unit of Measure	Output Units by Year										
				86	87	88	89	90	91	92	93	94	95	96
Pole Creek Buildings	Jarbridge	L24	Project							1			1	1
Mahoney Water System	Jarbridge	L46	System		1									
Baker Office	Snake	L24	Project			1								
Baker Administrative Site Bunkhouse/ Warehouse	Snake	L24	Project						2					
Baker Administrative Water System	Snake	L46	System						1					
Cherry Creek Administrative Site Building	Quinn	L24	Project											1
Elko Warehousing	Supervisor's Office	L24	Project								2	2	2	

FOREST ACTION SCHEDULE
Facilities Removal

Project Name or Description	Management Area/ District	MIH Code	Unit of Measure	Output Units by Year										
				86	87	88	89	90	91	92	93	94	95	96
Dog Springs	Moriah	L25,A07 D07	Building		1									
Murphy Wash	Snake	L25,A07 D07	Building			1								
Cedar Cabin Springs	Snake	L25,A07 D07	Trailer			1								
Baker Trailer	Snake	L25,A07 D07	Trailer	1										
Teapot Springs	Schell	L25,A07 D07	Building	1										



V.

Implementation
of the
Forest Plan



CHAPTER V

IMPLEMENTATION OF THE FOREST PLAN

A. Implementation Direction

1. Consistency with other Management Instruments

During implementation of this Forest Plan, the Humboldt National Forest will be guided by existing and future laws, regulations, policies, and guidelines. The Forest Plan is designed to supplement, not replace, direction from these sources except in specific instances.

This Forest Land and Resource Management Plan replaces all previous management plans, except for Allotment Management Plans. All outstanding and future permits, contracts, coop agreements, and other instruments for use and occupancy will be brought into conformance by October 1, 1987.

2. Budget Proposals

The Forest Plan provides the management direction for developing multi-year implementation programs. The Plan's scheduled practices, shown in the Forest Action Schedule are translated into multi-year program budget proposals which identify the needed expenditures. These processes complement the Forest planning process as vehicles for requesting and allocating the funds needed to carry out the planned management directions. The Forest's proposed annual program budget is the basis for the requested funding. Upon approval of a final budget for the Forest, the Annual Program of Work is finalized and carried out. The accomplishment of the Annual Program is the incremental implementation of the management direction of the Forest Plan.

3. Environmental Analysis

Future environmental analyses associated with the above processes will usually be tiered to the Forest Plan and FEIS. Information appropriate for project-related decisions rather than land use decisions, will normally be utilized in such environmental analyses.

Projects and activities permitted within the Forest Plan will be subjected to environmental analysis as they are planned for implementation. If the environmental analysis for a project shows that: (1) the management area prescription and standards can be complied with and (2) little or no environmental effects are expected beyond those identified and documented in the Forest Plan FEIS, the analysis will probably result in a categorical exclusion. A Decision Notice may be used to document the decision. An analysis file and/or a project file will be available for public review, but this will not necessarily be documented in the form of an Environmental Assessment or Environmental Impact Statement.

B. Monitoring and Evaluation Program

This monitoring and evaluation plan is designed to provide feedback to planners and the Forest Supervisor. It will provide Forest Managers with information primarily on plan implementation and the effects of implementation. A summary of this information will be made available to the public on an annual basis.

More specifically this plan will determine:

- If the Forest is achieving the goals and objectives of the plan as predicted.
- If the standards and guidelines are being applied as specified in the plan.
- If the effects of implementation are as predicted.
- If the Forest's program and management are resolving the planning issues.
- If the cost of implementation of the plan and work force needed is as predicted.

The monitoring plan that follows is comprised of the following components.

1. MIH Code - the numerical identifier of the item to be monitored.
2. Activity, practice or effort - a specific statement of what will be monitored.
3. Intent of Monitoring - a specific statement of the monitoring goal.
4. Monitoring technique - a description of the technique and sources of information to be employed. To the extent possible, existing reporting systems and standard methods will be used.
5. Estimate of the Precision and Reliability - precision is the exactness or accuracy of the data collected. Reliability is the degree to which the results of the monitoring activity can be duplicated. Both precision and reliability will be rated with a qualitative three-class system estimating rates of precision and reliability as high, medium, or low.
6. Responsibility - the identification of the office(s) responsible for implementing the monitoring process.
7. Measurement frequency - the schedule of samples stated in parts of year or years. Includes some measure of sample size or number.
8. Reporting period - the reoccurring interval between reports summarizing monitoring results for a particular activity or practice. The sampling period should be long enough for specialists to capture significant information.
9. Level of monitoring/sample size - a specified amount of examination needed to provide the required level of precision and reliability.
10. Variation which would initiate further evaluation/standard - a statement describing the tolerance limits within which actual performance can vary from predicted performance. When these limits are exceeded, further evaluation is triggered.

MONITORING AND EVALUATION PROGRAM

MH	Activity Reference Code	Activity Practice or Effect To Be Measured	Monitoring Technique	Expected Precision/ Reliability	Measurement Frequency	Reporting Period	Variation Which Would Cause Further Evaluation and/or Change in Management Direction	Intent of Monitoring	Responsi- bility	Monitoring Sample Size
Dispersed Recreation										
A08	Dispersed Visitor Use (Summer and Winter)	Road counters, Parking lot counters, Annual RDM Reports	W/L	Annual	5 Years	Visitor use varies from projected demand by greater than 20%	Determine dispersed visitor use	SV/ Districts		
A02	Site Condition	Limits of Change-Photo points, trans- sects, key sites adjacent to water	H/M	5 Years	5 Years	Composite condition below Class III using the Limits of Change	Maintain soil and vegetation	SV/ Districts		Key Sites
A02	Trail Condition	Trail Condition Surveys	H/M	23 Annually	4 Years	Trail mileage classed as inadequate (sub- standard) increasing	Maintain trail condition	SV/ Districts		100% Sample
A01	Off-Road Vehicle Travel	Field exam	L/M	5 Years	5 Years	Acres increase by 10% over last inventory	Maintain soil and vegetation	SV/ Districts		
Cultural Resources										
A02	Assure surveys and appropriate evaluation and assessment are conducted for all projects which might have the potential to impact cultural resources prior to initiation of the project	Environmental Analysis, Operating Plans, Accomplishment Report	H/H	Ongoing	Annual	Deviation from standards and guide- lines; 25% of projects not assessed prior to implementation; and, when possible, to an agency decision; destruction of cultural resources without proper identification and evaluation; or deterioration of adverse effect	Protect cultural resources	SV/ Districts		Forest-adj Projects
A03	Nomination of Properties	Federal Register, State Register, Accomplishment Report	H/H	100% Sample Every 5 Years	5 Years	No properties nominated	Protect cultural resources	Recreation Staff		100% Sample
A04	Monitor existing significant properties to assure no deterioration or destruction occurs	Field Examination	H/H	100% Sample of Significant Sites every 2 Years	2 Years	Identification of potential loss of values which contribute to significance of the property	Protect cultural resources	SV/ Districts		100% Sample

MONITORING AND EVALUATION PROGRAM

MOH Reference Code	Activity Practice or Effect To Be Measured	Monitoring Technique	Expected Precision/ Reliability	Measurement Frequency	Reporting Period	Variation Which Would Cause Further Evaluation and/or Change in Management Direction	Intent of Monitoring	Responsi- bility	Monitoring Sample Size
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Developed Recreation-Public

A07	Condition of facilities (whether the condition of developed facilities is declining from the current situation)	Annual RTH Reports-Total \$ needed to bring facilities to maintenance Class I	RTH	Annual	5 Years	Five year average exceeds 1982 by 5% after 1990	Protect existing facilities	Recreation staff	100% Sample
A07	Soil and vegetative loss at developed sites	Transects photo points at selected key sites	RTH	5 Years	5 Years	Capitate condition below Class III using the Limits of Acceptable Change	Protect existing site soil and vegetation	Districts	Key Sites
A02	Facility Capacity (whether construction and reconstruction of facilities is keeping pace with demand)	PAOT, PAOT-Days	RTH	Annual	5 Years	PAOT and PAOT-Days greater than or equal to 90% of projected demand	To meet public demand	Recreation Staff	100% Sample
A07	Developed Site Service (whether Forest is able to provide service scheduled in the plan)	PAOT-Days RTH, Attainment Report	RTH	Annual	5 Years	PAOT-Days Five year average exceeds or declines from the Forest Plan objective by 10%	To provide existing service	Recreation Staff	100% Sample
A07	Developed Site Use - Amount & Distribution (does demand exceed supply?)	Rundown sample all for sites	RTH	Annual	Annual	Use of an individual site exceeds 60% of theoretical capacity for the summer season or daily use exceeds capacity on more than 5% of the days in the summer season	To determine if distribution of use & supply are in balance	Recreation Staff	100% Sample

Monitoring of recreation budgets is reflected in the amount of service provided and recreation facilities reconstructed in items above

Developed Recreation-Private

A07	Organization Site Use (Are existing sites being fully utilized?)	Permittee Occupancy Plan-Pre-season, Occupancy Reports-Post-season, Regular visits to check occupancy	RTH	1st, 5th, 10th Year	5 Years	Vacant private exceeding 50% of the summer season	To determine if existing sites are being fully utilized	SV/Districts	100% Sample
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MONITORING AND EVALUATION PROGRAM

M&E Reference Code	Activity Practice or Effect To Be Measured	Monitoring Technique	Expected Precision/Reliability	Measurement Frequency	Reporting Period	Variation Which Would Cause Further Evaluation and/or Change in Management Direction	Intent of Monitoring	Responsibility	Monitoring Sample Size
Visual Resources									
A02	Compliance with visual quality objectives	Recreation Staff Officer evaluate a minimum of two of previous years projects, Selection at random from list of previous years completed projects during mini-QR reviews	H/M	Annual	Annual	More than one sampled project does not meet VQO in a given year or one or more projects in two successive years does not meet VQO	Protect visual resources	Recreation Staff	Minimum of 2 projects each year
Wilderness									
B03	Condition of campsites and surrounding area (Are conditions declining from the current situation?)	Limits of change at key sites	H/M	5 Years	5 Years	Limit of change analysis shows that the condition class has declined one class on 25% of inventoried sites	Maintain wilderness quality	SD/Districts	Key Sites
B03	Amount and distribution of human use	Trail registration Trail couriers and trailhead courts with periodic intensive sample verification	H/M	Annual	Annual	Human use exceeds area capacity identified in this Plan	Maintain the quality of the wilderness experience	SD/Districts	
Wildlife and Fish									
C01	MDS Population Trends a. Deer b. Fish c. Sage grouse d. Goshawk	Obtain State records as to: Aerial recon on winter range, Electrofencing, Strutting ground survey, brood courts	M H/M H/M	Annual Annual Annual	5 Years 5 Years 5 Years	20% Change 10% Change 20% Change	To assure that current MDS population levels are managed for or exceeded	NOM/FS NOM/FS NOM/FS	Forest-wide Forest-wide Forest-wide
C01	Habitat diversity	Field scan	L	5 Years	5 Years	10% Change	To assure that a diversity of habitats are provided to maintain current species diversity	SD/Districts	Forest-wide

RDB Reference Code	Activity Practice or Effect To Be Measured	Monitoring Technique	Expected Precision/Reliability	Measurement Frequency	Reporting Period	Variation Which Would Cause Further Evaluation		Intent of Monitoring	Responsibility	Monitoring Sample Size
						and/or Change In Management Direction				
Wildlife and Fish										
CO1	Habitat Improvement (incl. cost analysis)	Attainment and wildlife reports	H	Annual	Annual	10% Change	To assure that coordination with other resources is sufficient to maintain and improve habitats in key areas adequate to meet Forest habitat objectives	SV/Districts	Forest-wide	
CO1	Conformance with Standards and Guides									
	A. Aquatic and riparian habitat	R-I Gages analysis, sequential photo points to measure stream-bank stability, vegetation cover etc.	H/H	10 Years	Annual	15% change	To assure that coordination with other resources is sufficient to maintain and improve habitat in key areas adequate to meet Forest objectives	SV/Districts	Forest-wide	
	B. Winter range habitat	Trend transects located in coop with RDCI, distribution mapping, winter range area vegetation mapping	H	10% Annually	Annual	20% change from present status	"	RDH/SV Districts		
	C. Habitat Modification	Techniques verify whether project objectives were met	H	Annually		20% change	"	RDH/SV Districts		
CO1	Federally listed life species									
	A. Lahontan cutthroat trout	Continue cooperative stream inventory program	H/H	10-15 Years	10 Years	No decline permissible	To assure that recovery efforts are accomplished as outlined in approved Recovery Plans	RDH/FS SV Districts	Jarvisburg Mtn. City Rdy Mtn. Santa Rosa Ely	
	B. Peregrine falcon	Recon observation	L	Annual	5 Years	No decline permissible		RDH	Rdy Mtn.	

MONITORING AND EVALUATION PROGRAM

NRI Reference Code	Activity Practice or Effect To Be Measured	Monitoring Technique	Expected Precision/ Reliability	Measurement Frequency	Reporting Period	Variation Which Would Cause Further Evaluation and/or Change in Management Direction	Level of Intent of Monitoring	Responsi- bility	Monitoring Sample Size
Range									
D01	Grazing use record	Record of actual use by livestock or wild free- roaming horses	N/M	Annual	Annual	Whether change up or down 10% or more	To check for compliance with the grazing permit; to determine the presence of excess animals; to firm up stocking capacity	District Ranger	According to approved N/P or T/P
D01	Distribution and intensity of grazing use	Use mapping	N/M	According to approved N/P or T/P	End of grazing cycle or every 5 years	Whether grazing use occurs or use intensity is outside of standards	To identify management problems; to firm up stocking capacity	District Ranger	According to approved N/P or T/P
D02	Key forage plant utili- zation	Grazing impact study	N/M	According to approved N/P or T/P	End of grazing cycle or every 5 years	Proper use standards are not being met	To identify management problems; to firm up stocking capacity	District Ranger	According to approved N/P or T/P
D02	Weather Information	General obser- vation of plant growing conditions	N/M	Annual for each Ranger District	Annual for each Ranger District	Significant change in weather occurs, e.g. dry rainy, stormy cold or hot	To determine effect on forage production; to interpret management effectiveness	District Ranger	Observations of seasonal weather patterns on District
D02	Long-term trend in range conditions	Measure change in ecological status and/or resource value	N/M	According to approved N/P or T/P	According to approved N/P or T/P	Ecological status or resource value changes	To determine management effectiveness	District Ranger	According to approved N/P or T/P
D02	Supplemental information such as phenology, ground cover, fire, insects, diseases, noxious weeds, rodents, photographs, enclosures and collection areas	According to approved N/P or T/P	N/M	According to approved N/P or T/P	According to approved N/P or T/P	A significant event occurs or information indicates a need for change in management practices	To help interpret management effectiveness	District Ranger	According to approved N/P or T/P

MONITORING AND EVALUATION PROGRAM

MOR Reference Code	Activity Practice or Effect To Be Measured	Monitoring Technique	Expected Precision/Reliability	Measurement Frequency	Reporting Period	Variation Which Would Cause Further Evaluation and/or Change in Management Direction	Intent of Monitoring	Responsibility	Monitoring Sample Size
Range									
D03	Implement non-structural treatment projects where needed to arrest deterioration and improve carrying capacity	According to approved NEP	M/H	According to approved NEP	According to approved NEP	Compare results with NEP objectives	To determine the effectiveness of projects	District Ranger	Prior to treatment 2nd and 5th year after treatment
D05	Install structural range improvements to implement management systems and improve distribution on the range	According to approved NEP	M/H	According to approved NEP	According to approved NEP	N/A	To determine effectiveness of projects	District Ranger	Use mapping and allotment inspections
Note: NEP = Allotment Management Plan; TRP = Territory Management Plan									
Timber									
E02	Estimate where the soil resource or site productivity has been identified as being a significant issue	Review of timber sales prescriptions and post sale surveys	M/H	As needed on project basis	10 years	Violation of visual quality objectives or riparian area damage	Maintenance of visual quality and riparian area	SO/Districts	
E03 E04	Reforestation and timber stand improvement accomplishment	Review of T.S.I. and reforestation accomplishment reports	M/H	Annual	Annual	Failure to meet targets or accomplish NV needs in timber sale plans	Ensure proper management of timber stands	SO/Districts	Reported TSI work
	Fuelwood consumption and supply	Determine supply by fuels inventories, and acres available; demand by permits issued	M/H	On project basis	Annual	Supply is not meeting or projected supply is not expected to meet demand within 10 years	Provide the public with adequate supply of fuelwood	SO/Districts	
E07	Verify classification of suitable and unsuitable lands	Examine lands during silvicultural years, timber sales and inventories to ground truth capabilities	M/H	On project basis as prior to Forest Plan update	10 years or Forest Plan update date	If over 10% of unsuitable land was found to meet the criteria for suitable land classification, regardless of reason	Assure inventory is accurate	SO/Districts	Forest-wide

MONITORING AND EVALUATION PROGRAM

MHI Reference Code	Activity Practice or Effort To Be Measured	Monitoring Technique	Expected Precision/Reliability	Measurement Frequency	Reporting Period	Variation Which Would Cause Further Evaluation and/or Change in Management Direction		Intent of Monitoring	Responsibility	Monitoring Sample Size
Soil and Water										
F01	EA's share the soil resource or site productivity has been identified as being a significant issue	Review all EA's share soil resources or site production has been identified as a significant issue	H/H	Annual	I/A	Project/activities not meeting soil productivity H/H and/or project success less than predicted		To ensure that adequate consideration is given to the soil resource during the planning process to prevent identifiable project failure and/or soil resource degradation	SD	Forest-wide all EA's where the resource or productivity has been identified as a significant issue
F01	Management activity/products where soil resource interpretations were key to implementation	Quarter estimates standard soil survey techniques	H/H	Annual	3 Year	Project/activities not meeting soil productivity H/H and/or project success less than predicted		Improve reliability of soil resource interpretations for soil limitations/management activity relationships	SD	Forest-wide 5-15 projects, all areas of the key project to each resource area
F09	Baseline Condition Riparian area, including: 1. Aquatic ecosystems a. Stream (Forest-wide includes in-stream flows) b. Lakes 2. Riparian Ecosystems (Forest-wide) 3. Flood plain (Forest-wide) Wetlands	Standard methods used to classify, monitor, and evaluate riparian area resource conditions including: - chemical, physical and biological constituents in the aquatic ecosystem - stream regimen - watershed condition of riparian and stream terrestrial zone	H/H	1,3,5 years	5 Year	Downward trend is established or State water quality standards are not met		Characterized existing conditions to establish of instream flow needs, water quality standards, and evaluating cumulative impacts from multi-resource management; to be coordinated resources	SD	Forest-wide 5 to 15 streams

MONITORING AND EVALUATION PROGRAM

MHI Reference Code	Activity Practice or Effect To Be Measured	Monitoring Technique	Expected Precision/ Reliability	Measurement Frequency	Reporting Period	Variation Which Would Cause Further Evaluation and/or Change In Management Direction	Intent of Monitoring	Responsi- bility	Monitoring Sample Size
Soil and Water									
Project-Induced Conditions									
F09	Riparian area and watershed runoff conditions resulting from livestock grazing, fuelwood harvesting and mineral development activities	Same as above	H/M	Annual	Annual	Soil or water HRI's not set	Determine cause and effect relationships designed to meet one or more of the following objectives: Compliance with State water quality standards; verify attainment of riparian area goals and objectives; Measure effectiveness of Standards/guidelines	SO	Forest-wide 3 to 8 projects
F03	Completed or proposed water resource improvement projects	On-site and sequential photo points	H/LH	Annual	Bi-annual	Improvement work not meeting project objectives and/or project effectiveness not sustained; soil or water resource HRI's not monitored	Determine effectiveness of completed water resource management work and establish trends for sites identified in the watershed improvement inventory	SO	Forest-wide

MONITORING AND EVALUATION PROGRAM

M&E Reference Code	Activity Practice or Effect To Be Measured	Monitoring Technique	Expected Precision/Reliability	Measurement Frequency	Reporting Period	Variation Which Would Cause Further Evaluation and/or Change in Management Direction	Intent of Monitoring	Responsibility	Monitoring Sample Size
Soil and Water									
P01	EAs where the water resource or riparian area has been identified as a significant issue	Review all EAs where the water resources or riparian area has been identified as a significant issue	H/H	Annual	NA	Project/activities not meeting water resource M&E's and/or project access less than predicted	To ensure that adequate consideration is given to the riparian area dependent resources during the planning process in order to prevent project failure and/or resource degradation	SD Districts	All EAs where the water resource is a significant issue

Minerals

002	Validity cases in Wilderness Areas.	Evaluate operating plan proposals	H/H	As plans are submitted	Annually	Workload exceeding capacity of mineral assessment	Determination of discovery prior to date wilderness designation	SD/NO Geologist or Mining Engineer	All (100%) of Operating plans filed
003/005	Exploration and operating plan proposals	Review completed proposals	H/H	Ongoing	Annually	Operating proposals not processed per time frames E.A., stipulations, mitigation or reclamation plans inadequate	Secure surface resource protection	SD Districts	Major proposals with significant impacts, approximately 10% of those filed
004	Lease applications	Check processing time on Forest	H/H	Annually	Annually	Processing time exceeds 45 days on the Forest	To ensure timely lease processing	SD	100% of applications
	Leases	Count leases issued	H/H	Annually	Annually	Leases issued exceeds by 10% the number funded	To ensure compliance with lease stipulations	SD	100% count

MONITORING AND EVALUATION PROGRAM

MH Refer- ence Code	Activity Practice or Effect To Be Measured	Monitoring Technique	Expected Precision/ Reliability	Measurement Frequency	Reporting Period	Variation Which Would Cause Further Evaluation and/or Change in Management Direction	Intent of Monitoring	Responsi- bility	Monitoring Sample Size
Minerals									
CO6	Administration of operations	Compliance checks	H/H	Continuous	Annually	Violations exceed 5% of operations	Prevention of unnecessary resource damage	Districts	100% Year
	Administration of operations	Appraisal of reclamation	H/H	Biannually	Annually	Reclamation failures in more than 25% of plans	Check quality of reclamation and erosion control	District/ SO	50% Year
	Plans	Count plans administered	H/H	Annually	Annually	Exceed by 10% the plans funded	To determine District work- load	Districts	100% count
Lands									
J01	Construction of utilities	Construction within approved corridors	H/H	5 Years	Every 5th Year	Environmental analysis determines that a proposed corridor is better suited than corridors approved in the plan	Minimizes impacts of utilities	SO	Projects
J18 J13	Road and trail R-O-I acqui- sitions and land exchanges	Management Attainment Report	H/H	Annual	Every 5th Year	If accomplishment in the first five years is less than 50% of the plans program, evaluate the program; if adjust- ments are required place them in the next plan period.	Maintain attainment	SO	Attainment Report
J10	Occupancy Trespass	Number of trespass reports	H/H	Annual	Every 5th Year	Number of occupancy trespasses unresolved exceeds the 1981 inventory	Resolve occupancy trespass cases	SO/ Districts	Number of cases
	Research Natural Areas	Inspection Reports	H/H	Annual	Annual	Any degradation of the HMA.	Prevention of resource damage or intrusions which would impair the value of the RMA	SO/ Districts	100% Sample

MONITORING AND EVALUATION PROGRAM

MIR Reference Code	Activity Practice or Effect To Be Measured	Monitoring Technique	Expected Precision/Reliability	Measurement Frequency	Reporting Period	Variation Which Would Cause Further Evaluation and/or Change in Management Direction	Intent of Monitoring	Responsibility	Monitoring Sample Size
Facilities									
L2, 18, 29	Road and bridge construction and reconstruction	Accomplishment Report	H	Annual	5 Years	A 25% deviation from projected quantities	To determine objectives, and attainment	SD	Forest-wide
L24 L25	Buildings	Inspection Reports	M	Annual	5 Years	Failure to correct identified health and safety hazards	To ensure a safe and healthful workplace	SD/Districts	Forest-wide
L28	Dam Administration	Inspections	H	Annual	Annual	Failure to follow-up on identified problems	To ensure the Forest Service owned or controlled or operated and maintained to standards which safeguard lives and property	SD	Forest-wide
Protection-Fire									
P08	Fire management program effectiveness	Calculate fire management effectiveness index (FMEI)	H/H	Annual	5 Years	20% increase in FMEI (FFP + FFP & NC.... FSH 5109.19)	Minimize costs plus INC	SD	100% Sample
P02	Person-caused fire occurrence	Number of person-caused wildfires	H/H	Annual	5 Years	20% increase in cumulative 5 year average	Prevent an increase in person caused fires	SD/Districts	100% Sample
P01	Wildfire effect upon resources and developments	Calculate the net resource output change following project fires	M/M	Five Year intervals following project fires	5 Years	20% change in outputs	Maintain Forest's output of goods and services	SD/Districts	Attainment Reports
P01	Prescribed fires effect upon resources and developments	Calculate the net resource output change following fire	M/M	Five Year intervals following fire	5 Years	Any decrease in output	Prevent adverse impacts from prescribed fires	SD/Districts	Attainment Reports

MONITORING AND EVALUATION PROGRAM

MMH Reference Code	Activity Practice or Effect To Be Measured	Monitoring Technique	Expected Precision/ Reliability	Measurement Frequency	Reporting Period	Variation Which Would Cause Further Evaluation and/or Change In Management Direction	Level of Intent of Monitoring	Responsi- bility	Monitoring Sample Size
Protection - Insect - Disease									
F34	Survey of population levels of insects and diseases	Aerial surveys	H/M	Annual	Annual	As recommended by entomologist	Detect potential problem areas	SO/ Districts	As needed

* Abbreviated as: H = High, M = Moderate, L = Low
Precision is the exactness or accuracy of the data collected.
Reliability is the degree to which the results of the monitoring activity can be
duplicated.

C. Revision and Amendment

The Forest Supervisor may change proposed Forest Action Schedules to reflect differences between proposed annual budgets and appropriated funds. Such scheduled changes shall be considered an amendment to the Forest Plan, but shall not be considered a significant amendment, or require the preparation of an environmental impact statement, unless the changes significantly alter the long-term relationship between levels of multiple-use goods and services projected under planned budget proposals as compared to those projected under actual appropriations.

The Forest Supervisor may amend the Forest Plan. Based on an analysis of the objectives, guidelines, and other contents of the Forest Plan, the Forest Supervisor shall determine whether a proposed amendment would result in a significant change in the Plan. If the change resulting from the proposed amendment is determined to be significant, the Forest Supervisor shall follow the same procedure as that required for development and approval of a Forest Plan. If the change resulting from the amendment is determined not to be significant for the purposes of the planning process, the Forest Supervisor may implement the amendment following appropriate public notification and satisfactory completion of NEPA procedures.

A Forest Plan shall ordinarily be revised on a 10-year cycle or at least every 15 years. It also may be revised whenever the Forest Supervisor determines that conditions or demands in the area covered by the Plan have changed significantly or when changes in RPA policies, goals, or objectives would have a significant effect on Forest level programs. In the monitoring and evaluation process, the interdisciplinary team may recommend a revision of the Forest Plan at any time. Revisions are not effective until considered and approved in accordance with the requirements of the development and approval of a Forest Plan. The Forest Supervisor shall review the conditions on the land covered by the Plan at least every 5 years to determine whether conditions or demands of the public have changed significantly.

This Forest Plan will be revised when necessary but no later than October 1, 2000.

